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FOREST SURVEY RELEASE NO. 57 MAY 1961 U.S. DETT. OF AGRICULTURE FLORIDA'S TIMBER JUN 1 4 1951 CURRENT SERIAL RECORDS bу Robert W. Larson and Marcus H. Goforth U.S. DEPARTMENT OF AGRICULTURE FOREST SERVICE SOUTHEASTERN FOREST EXPERIMENT STATION ASHEVILLE, NORTH CAROLINA

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The Forest Survey is part of a continuing nationwide inventory of timber resources conducted by the U. S. Forest Service. In the southeastern states, it is a function of the Division of Forest Economics Research of the Southeastern Forest Experiment Station under the direction of the late J. F. McCormack.

Mackay B. Bryan organized and directed the Florida Forest Survey and Joe P. McClure supervised the collection of the field data. Ronald C. Froelich supervised the survey of timber products cut from Florida timber. Land-use interpretation of aerial photos was made by William H. B. Haines.

Agnes C. Nichols supervised the office compilations and Hilda J. Brown and Mercina P. McSwain typed the detailed statistical tables.

### HIGHLIGHTS

The timber supply outlook has changed considerably during the 24 years since the first Forest Survey was completed in 1936. Today, Florida has 11 percent less commercial forest land, about the same volume of pine timber, but nearly a third more volume in cypress and hardwood trees, mainly small and of low value.

Today's timber, especially the pine timber, is on the average smaller. The volume of all species of sawtimber has been greatly reduced since 1936, but this was offset by a big increase in small timber.

There are 5.5 million fewer acres growing pine, but the area still qualifying as pine type is much better stocked. In fact, this increase in pine stocking more than offset the loss of area in pine and oak-pine type. The volume of pine growth is almost a third greater, even though pine inventory remained essentially unchanged. This increase in growth reflects the upsurge in young timber, mainly in response to better fire protection.

In the past, most of the increase in pine stocking resulted from natural regeneration. Today, the natural regeneration outlook is not nearly so favorable. Hardwoods are increasing twice as fast as pine and are taking over more and more of

the land that formerly grew pine.

In the future, an increasing amount of the timber cut will have to come from planted stands. About half of Florida's forest land is poorly stocked and not expected to restock naturally with desirable timber. Also, each year 61 percent or about 300,000 acres of the pine area cut over is left poorly stocked,

with little prospect of restocking naturally to pine.

The current stepped-up planting activity promises to go a long way toward putting these idle acres to work. During the 1958-1959 planting season nearly 200 million trees were planted. With adequate protection and conservative cutting, in 30 years growth from plantations alone will be more than enough to replace the current cut. But this increase in growth will occur only if cutting for the State as a whole is not allowed to exceed the total growth — especially during the next 10 years.

During the past 10 years, cutting on the average slightly exceeded pine growth and has been somewhat more intensive in relation to growth than during the preceding 14 years. The intensity of cutting, however, appears to have fallen off during the past few years. Pine growing stock cut in 1958 was 25 percent below net growth and indications are that the 1959 and 1960 cut was also less than the growth.

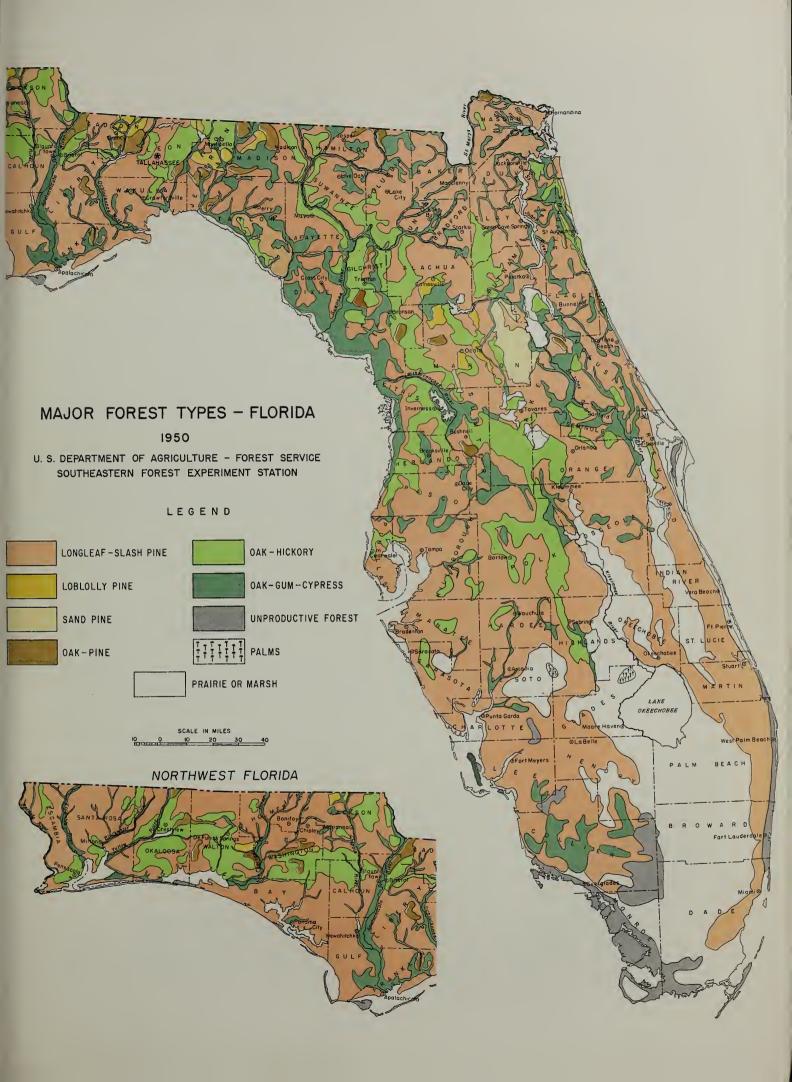
A continuation of this favorable growth-and-cut relationship for another four or five years will go a long way toward building up Florida's timber resources. However, plans for the expansion of forest industry to utilize surplus pine growth that may develop within the next few years should proceed with caution. Much of this surplus growth is on land owned by public agencies, pulp companies, and forest industries that are attempting to increase productivity by building up the growing stock. During the past 10 years the forest land held by other owners has been badly overcut, and this class of ownership includes 66 percent of the total forest area. Until productivity can be built up, expansion of forest industries dependent upon these "other" lands for pine timber should be discouraged.

Florida offers excellent opportunities for industries that can use low-value hardwoods and small cypress. Growth of this type of timber is well in excess of the cut. Much of it is on land better suited to growing pine and should be cut to make

room for pine.

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# FLORIDA'S TIMBER

b y

## Robert W. Larson and Marcus H. Goforth

The period between the completion of Florida's first Forest Survey in 1936 and the third in 1959

spans nearly a quarter of a century.

In 1936, the era of large sawmills was coming to a close, but half the lumber was still produced by a dozen large mills. Taxes were high and lumber prices had not recovered from the depression slump.

Fire burned uncontrolled over much of the forest area. In 1936, only 3.5 million acres out of the total 23.5 million acres of timber land

received protection from fire.

Four-fifths of the turpentine and rosin was made from crude gum. Workers collected gum

from the chipped faces of 36 million pine trees. The deeply scarred, pitch-soaked 8-foot butt section filled with nails and tins left most of the worked-out pine trees unsuitable for saw logs. In 1936, Florida had only one operating pulpmill and, in the absence of a market, most of the worked-out pines were left to the ravages of fire, wind, and insects.

Most people regarded planting, site preparation, and stand improvement as visionary. Planting contributed less than 3 million pine seedlings annually to the new crop. In 1936, overcutting, poor stocking, low growth, and high mortality were the rule.

## CHANGES IN THE TIMBER SUPPLY

### Less Land to Grow Timber

Since 1936, the timber supply outlook has changed in many ways. One important change has been the decrease in area of land available to grow timber. During the past 24 years, land-clearing in excess of reversion to forest from other uses has reduced the commercial forest area by 11 percent. Most of this reduction has taken place during the past 10 years. Since 1949, Florida has lost 1.9 million acres of commercial forest land to other uses (table A).

The biggest shift in land-use was from cutover timber land to improved pasture. In 24 years cattle raisers increased the area of improved pasture by nearly 2 million acres. Much of this area came from natural prairies but a large part, perhaps as much as half of it, came from land

that formerly grew timber. Also, an increasing amount of forest land is being diverted to such uses as housing developments, manufacturing sites, and highways. Land use for these purposes increased by a million acres since 1935, with most of the increase taking place during the past 10 years. The area used for agricultural crops has not changed much.

In spite of these changes, in 1959 commercial forests still covered 58 percent of the total land area in Florida. This included areas with at least a 10-percent cover of trees and areas formerly supporting tree growth but which have not been converted to other uses.

Not all of the forest area in Florida is suitable for growing commercial crops of timber. On nearly a million and a half acres, trees grow so slowly that few reach usable size in the time normally required to grow a crop of trees. Growth is low on much of this area because of poor drainage. In 1959, Florida had 19.6 million acres of com-

In 1959, Florida had 19.6 million acres of commercial forest land available to grow timber. In addition, there are about a million acres of idle or abandoned cropland. Some of this land will be returned to crops and, in the light of recent

<sup>&</sup>lt;sup>1</sup> The first Florida forest survey was begun in November of 1933 and completed in April 1936. For comparison purposes, 1935 is used throughout this report as the average year of inventory, making a span of 24 years between the first and the third survey.

Table A. --Land area by class and major forest type, Florida, 1935, 1949, and 1959

(In million acres)

Land along and forest time	Year of survey			
Land class and forest type	1935	1949	1959	
Commercial forest land:				
Pine and oak-pine type Hardwood type		14.8 6.7	11.6 8.0	
Total	21.9	21.5	19.6	
Noncommercial forest land	1.6	1.6	1. 4	
Nonforest land	11.3	11.4	13.0	
All land	34.8	34.5	34.0	

trends, it appears quite likely that much of it will eventually end up as improved pasture. Part of this area, however, perhaps as much as half of it, will not be put to other uses and will be available to grow timber. So, altogether, Florida currently has about 20 million acres available that are suitable for growing commercial crops of timber.

## Less Land Growing Pine

Pine is the lifeblood of Florida's forest industries. However, not only has forest area declined but the area growing pine has dropped even more. Lands on which at least 25 percent of the stand is pine (the pine and oak-pine types) have fallen from 17.1 million acres in 1935 to 11.6 million acres in 1959. Three-fourths of the forest land in Florida is uplands and flatwoods well suited to growing pine but, in 1959, 21 percent of this area did not have enough pine growing on it to qualify as a pine or oak-pine type. Most of the upland and flatwoods area now without pine formerly grew pine but today is either denuded or covered with shrubs and low-value hardwoods.

# Better Pine Stocking

While there is less land growing pine, the areas qualifying as pine types are much better stocked now than they were 24 years ago. Since the first Survey, the number of pine trees 1.0 inch d.b.h. and larger has more than doubled. In 1935, despite the large area in pine type, Florida had only enough pine trees to fully stock 3.8 million acres; the number of pine trees now is sufficient to stock 6.8 million acres. However, this is still less than half of the 14.6 million acres of upland and flatwoods area siutable for growing pine.

# Hardwoods Increasing Faster Than Pine

The decrease in prevalence of wild woods fires has allowed the hardwoods to increase even faster than pine. While the number of pine trees 1.0 inch and larger increased by 1.1 billion trees, the number of hardwoods increased by 2.1 billion. Area in hardwood types has increased 3.2 million acres. Large areas formerly growing pine now support stands of low-value scrub oak.

## Little Change in Pine Volume

The large increase in number of trees did not result in a corresponding increase in timber volume. The increase in pine, which was mainly in small trees, barely offset the loss of volume in large trees. During the 24-year period between the first and third Forest Surveys, the volume of pine growth has exceeded the mortality and timber cut by a slight margin. The total volume of pine, including the volume of growing stock trees and culls,<sup>2</sup> was almost the same in 1959 as in 1935 (table B).

One of the most important changes has been the disappearance of the large pine sawtimber. Although the volume in pine growing stock (timber now or potentially suitable for saw logs) has changed little, the volume of sawtimber in trees 15.0 inches and larger was reduced 52 percent. The volume in small sawtimber has changed but slightly, while the volume of poletimber is up.

Although the volume of pine timber is almost the same as it was 25 years ago, the recent trend in pine inventory volume appears to be downward. The total volume, the growing stock volume, and the volume of small sawtimber all rose between 1935 and 1949 but have decreased since 1949.

The years between 1935 and 1949, when small pine timber volume increased, were the years when the large timber was cut out. Since 1949, the volume in large sawtimber has decreased only slightly, reflecting a decrease in availability. Much of the remaining large sawtimber is either too widely scattered for economical logging or is on land where owners are trying to build up the growing stock volume.

## More Pine in Northwest Florida

The location of the pine resource within the State is also changing (table C). The volume of pine in Northwest Florida is much greater now than in 1935, while in Central and South Florida

<sup>&</sup>lt;sup>2</sup> Not suitable for saw logs but mostly usable for pulpwood.

Table B. --Timber volume by species and type of timber, 1935, 1949, and 1959

Species group and type of timber	1935	1949	Percent change	1959	Percent 1
Pine:					
Large sawtimber (million board feet)	3,577.3	1,811.4	-49	1,701.9	-52
Small sawtimber (million board feet)	8,488.5	9,617.6	+13	8,425.3	-1
Growing stock2/ (million cubic feet)	3,222.0	3,349.6	+4	3,169.7	-2
All timber (million cubic feet)	3, 258. 4	3, 412.5	+5	3, 312. 6	+2
Cypress and hardwoods:					
Large sawtimber (million board feet)	6,423,6	3, 184, 6	-50	5,728,6	-11
Small sawtimber (million board feet)	5, 180. 0	4,712.8	-9	5, 512. 3	+6
Growing stock 2/ (million cubic feet)	3, 393, 1	2,768.5	-18	3,781.9	+11
All timber (million cubic feet)	4, 352.4	4, 353.5	0	5,599.3	+29

<sup>1/</sup> Change between 1935 and 1959.

it is much less. Although the volume in Northeast Florida is about the same as in 1935, the 9-percent decrease since 1949 indicates a current downward trend.

Pine timber is becoming more concentrated in the more productive land of Northern Florida. Northeast Florida, with 37 percent of the commercial forest area, has nearly half the pine volume, and Northwest Florida, with 29 percent of the forest land, has 39 percent of the pine volume.

## Big Increase in Pine Growth

Although the increase in number of trees did not result in a greater total volume of timber, it did affect growth. Mainly because of the large increase in small trees, pine growth has risen from 156 million cubic feet in 1935 to 217 million cubic feet in 1958.

Most of the rise occurred prior to 1949, when the largest increase in numbers of trees took place. Between 1935 and 1949, pine growth increased 23 percent compared to only 13 percent since 1949.

This growth increase is based on the average diameter growth and the average mortality rates for the period between surveys and reflects entirely the change in the size-class distribution of trees. Pine stands contained three times as many 2- and 4-inch pines in 1959 as in 1935. Growth resulting from 4-inch trees growing into the 6-inch class had doubled and, in 1959, accounted for 22 percent of the total growth. A 57-percent increase in the number of 6- and 8-inch trees also contributed substantially. This expanding growth of small timber has raised substantially the capacity of the timber resource to support the now dominant pulp and paper industry and those other industries which are able to use small logs or bolts.

However, a 52-percent decrease in the volume of large pine sawtimber has reduced the growth of this class of timber and the capacity of the timber resource to support industries dependent upon large, high-quality material.

Table C. --All timber volume by Forest Survey Unit and species group, 1935, 1949, and 1959
(In million cubic feet)

Species group and Survey Unit	1935	1949	Percent change	1959	Percent 1/ change
Pine:					
Northeast	1,590.8	1,716.7	+8	1,563.4	-2
Northwest	915.4	1,102.7	+20	1,301.3	+42
Central-South	752.2	593.1	-21	447.9	-40
Cypress and hardwoods:					
Northeast	1,984.2	1,827.0	-8	2,351.7	+19
Northwest	1, 308. 2	1,392.5	+6	1,796.7	+37
Central-South	1,060.0	1, 134.0	+7	1,450.9	+37

<sup>1/</sup> Change between 1935 and 1959

<sup>2</sup>/ Net cubic-foot volume in all live trees 5.0 inches and larger, including trees too low in quality to make saw logs now or prospectively.



Florida Forest Service photo

Since 1935, the big increase in small timber has enabled pine growth to keep pace with the rising cut.



# Increase in Volume of Cypress and Hardwoods

In contrast to pine, which showed little or no change in volume, the total volume of cypress increased 9 percent during the past 24 years and the volume of hardwoods 39 percent. Also in contrast to pine, hardwood timber volume has increased faster during the past 10 years than between 1935 and 1949. Hardwoods now make up 44 percent of the total volume as compared to 37 percent in 1935.

Like pine, the most valuable class of cypress and hardwood timber has not fared so well. The volume of large cypress sawtimber dropped 31 percent, and the growth of large hardwood sawtimber did not quite replace the cut.

## More Low-Quality Timber

Increase in timber volume over the past 24 years added very little to the supply of the kind of timber forest industries now use. Cypress and hardwood timber, which accounted for practically all the increase in timber volume, make up a small part of the total cut — 4 percent from cypress and 11 percent from hardwoods. Even in these species much of the increase has been in low-quality timber. Between 1935 and 1959, the volume in cull cypress trees doubled and the volume in cull hardwood trees increased by 87 percent.

In 1959, nearly a third of the hardwood volume was in cull trees too low in quality ever to make saw logs. Over three-fourths of this volume, however, could be used for pulpwood if markets were available; only 7 percent of the hardwood volume has no industrial use (table D).

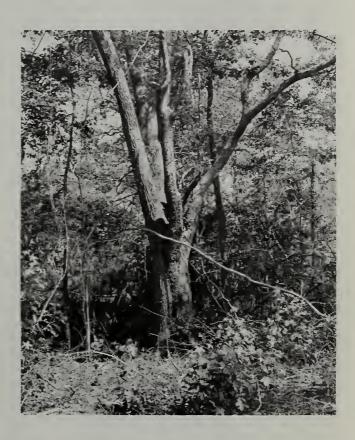
Only slightly better than cull timber is the large volume of trees that barely qualify as growing stock and will make only low-quality saw logs. Only 7 percent of the hardwood volume is in trees classed as desirable growing stock. The cut of veneer bolts and better-quality saw logs comes mainly from this class of timber.

The quality of cypress is considerably higher than that of hardwoods. Less than 10 percent

than that of hardwoods. Less than 10 percent of the volume is in cull trees, and a fourth of it is in trees classed as desirable growing stock.

Practically all the pine is suitable for sawtimber.

Practically all the pine is suitable for sawtimber now or potentially, and half of it is classed as desirable growing stock (trees capable of producing high-quality lumber and veneer).



Trees too poor in quality to make saw logs contain a third of the hardwood volume.

Table D. -- Timber volume by quality and species group, 1959

Timber quality	P	ine	Суј	oress	Hard	lwoods	To	otal
	Million cu. ft.	Percent						
Growing stock:								
Desirable	1,601.8	48	419.4	25	271.6	7	2,292.8	26
Other	1,641.2	50	1,080.7	66	2,468.5	62	5, 190. 4	58
Culls:								
Limited use	65.2	2	107.9	7	940.9	24	1,114.0	12
Unusable	4.4	0	39.3	2	271.0	7	314.7	4
All timber	3, 312, 6	100	1,647.3	100	3,952,0	100	8,911.9	100

## Lower Mortality

In 1935, much of the annual growth was lost to mortality. The stands were choked with worked-out turpentined trees too small and too poor in quality to make saw logs. Repeated fires burned the worked-out faces leaving the trees particularly susceptible to beetle attacks. Heavy winds prevalent during the late summer and early fall in Florida took a heavy toll of these structurally weakened trees. The 1935 survey showed that the volume in recently killed timber amounted to 60 percent of the total growth.

Since 1936, mortality has declined steadily. The pulpmills provided a market for the worked-out turpentine timber; better fire protection greatly reduced losses from this source. In 1936 only 3.5 million acres received organized fire protection. By 1950, the area protected had increased to 14 million acres, and as of June 30, 1960, 16.6 million acres, or 79 percent of Florida's total forest area, was under organized fire protection. During 1959, only 48,426 acres, or only 0.3 percent of the protected area, were burned by wildfires. Also, improved naval stores practices have reduced mortality.

As the number of pine trees and the stand density built up, the reduction in mortality resulting from better fire protection and improved turpentining was offset, in part at least, by greater losses due to suppression and overcrowding. In 1959, the volume lost to mortality was still about 30 percent of gross timber growth. Much of this

mortality could have been prevented by timely thinning.

## CHANGES IN TIMBER USE

Forest industries in Florida are using substantially more pine and less cypress and hardwood timber now than they were in 1935 (fig. 1). While, on the average, total volume of timber cut has remained about the same, the proportion of the cut from pine has increased from 64 percent in 1935 to 85 percent in 1958. In contrast, the proportion cut from cypress has dropped from 20 percent in 1935 to 4 percent in 1958, and the proportion coming from hardwoods has dropped from 16 percent in 1935 to 11 percent in 1958.

The actual cut in 1958 was substantially below the long-term trend — 198 million cubic feet in 1958 compared to the trend level of 249 million cubic feet. This slump in timber cut in 1958 reflects a sharp drop in both pulpwood and lumber production, probably in response to the recession. It is unlikely that this augurs a sustained downward trend. Year-to-year fluctuations are common, and the difference between the trend and actual cut in 1958 is no greater than in many other years.

Another change is that more and more of the timber cut comes from small timber. In 1948, three-fourths of the timber was cut from trees 11.0 inches and larger; in 1958, only 59 percent of the timber cut was from this size.

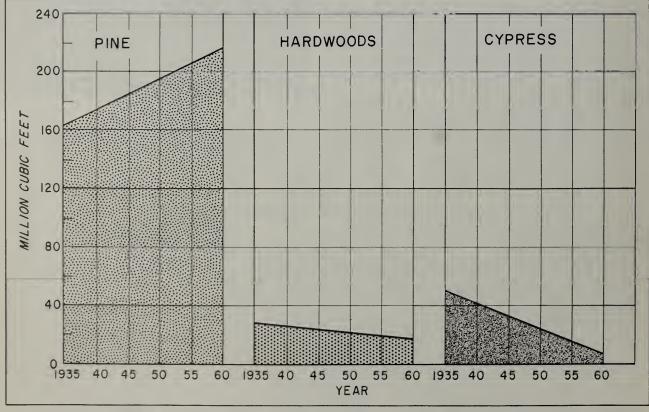


Figure 1.—Trend in timber cut, by species group, 1935 to 1960.

## Less Timber Used for Saw Logs

Changes in the cut by species and size reflect the changing pattern of use by product. Percent of the timber cut by product for the Survey years is as follows:

	1935	1948	1958
	(Percent)	(Percent)	(Percent)
Saw logs	55	41	28
Pulpwood	6	38	62
Other	39	21	10
<i>(</i> (1)	arrechination.		
Total all products	100	100	100

During the past 25 years a shift from a lumber to a pulpwood economy has taken place. Double band sawmills that eat their way through 20 to 30 million board feet of saw logs a year are a thing of the past. In 1909, 35 sawmills in Florida each cut 10 million or more feet of lumber a year. By 1948, this number had fallen to 7; and 10 years later in 1958, only 2 sawmills produced more than 10 million board feet. These large mills were replaced to some extent by small mills, but the production of these small mills was not sufficient to forestall the downward trend in lumber production.

Year-to-year fluctuations tend to hide the longterm trend. The computed trend over the past 22 years indicates a drop in the average annual production of softwood lumber from 657 million board feet in 1936 to 399 million in 1958 -- a drop of 39 percent (fig. 2). This trend level of 399 million board feet was still substantially above the actual softwood production of 232 million board feet in 1958.

The cutback has been particularly severe for cypress lumber. In 1936, cypress accounted for 25 percent of the softwood lumber produced, compared to 16 percent in 1948 and only 12 percent in 1958. In 1958, only 28 million board feet of cypress lumber was cut.

The rate of decline has not been quite so severe for pine. Yet, over a 22-year period between 1936 and 1958, the average annual pine lumber production has dropped about 30 percent.

Hardwood lumber production, though a small part of the total, has not changed much since 1936.



Florida Forest Service photo

Most of Florida's large timber has been cut out. Sawmills and pulpwood producers now compete for the same size trees.

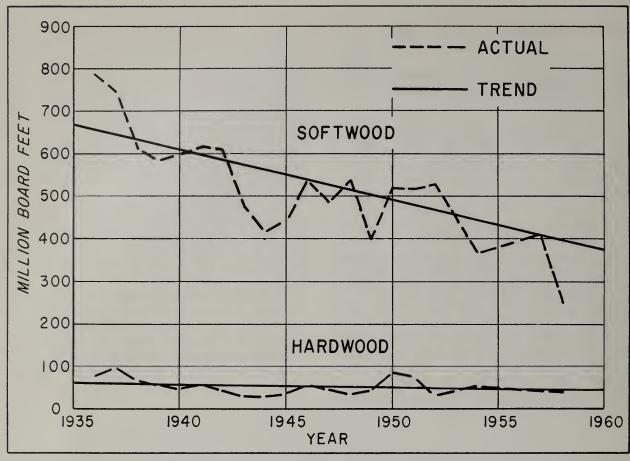


Figure 2.—Trend in lumber production, 1935 to 1960.

## Shift to Pulpwood

The pulp industry has taken over first place in Florida's timber economy from the large saw-mills. Nine pulpmills have been added to the one in existence in 1936, giving Florida more pulping capacity than any other state in the Nation.

Even by 1948, the shift to a pulpwood economy was well under way (fig. 3). In that year the

volume of timber cut for pulpwood very nearly equalled the volume cut for saw logs. By 1958, pulpwood accounted for 62 percent of the timber cut, compared to only 28 percent for saw logs.

The sharp increase in hardwood pulpwood pro-

The sharp increase in hardwood pulpwood production in 1957 and 1958 strongly suggests an upward trend in the use of hardwoods. Even with this large increase over past use, hardwoods are still a minor part of the total — 5 percent in 1959.

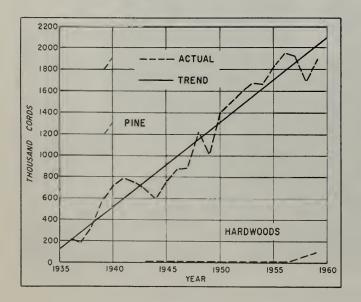
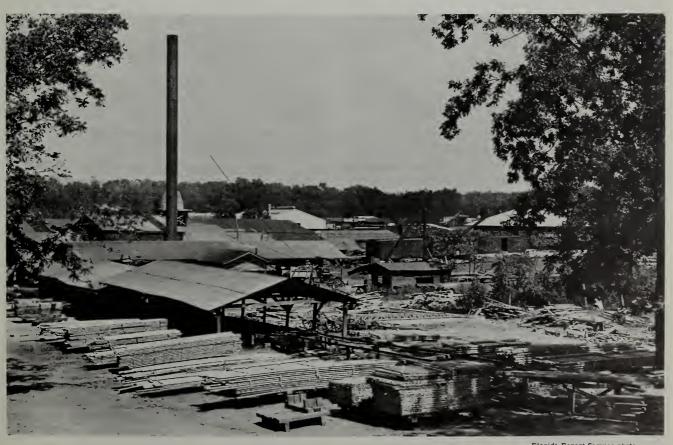


Figure 3.—Trend in pulpwood production (excluding residues), 1935 to 1960.



Florida Forest Service photo

# Pulpwood cut is increasing and lumber cut decreasing.



Florîda Forest Service photo

# Downward Trend in Other Forest Products

Much of the increase in pulpwood production has been offset by a drop in timber cut for other products. In 1958, products other than pulpwood and saw logs accounted for only 10 percent of the

timber cut from growing stock.

In terms of value, veneer continues to be an important use of timber in Florida even though the proportion of timber cut for veneer has dropped from 8 percent in 1948 to 4 percent in 1958. In 1958, 31 plants, including 6 that were out of the State, processed 60 million board feet of veneer logs and bolts (Doyle scale) from Florida's hardwood timber. The volume of hardwood timber used for veneer nearly equals that used for saw logs. About four-fifths of the veneer bolts were cut from blackgum, sweetgum, and tupelo.

The use of wood for fuel has also dropped sharply. The fuelwood proportion of the total output of timber products has dropped from 351,700 cords in 1948 to 287,155 cords in 1958. The amount cut from growing stock has dropped even more. In 1958, very little growing stock was

used for fuel.

The production of poles and piling increased rapidly between 1935 and 1948, but production has not changed much during the past 10 years.

Some forest industries are disappearing. Hewn railroad ties have steadily been replaced by sawn ties. Cooperage and shingle plants have completely disappeared from Florida in the last decade.

# More Complete Use of Timber Cut

Florida has made substantial progress toward more complete use of all trees cut. Today nearly all usable sections of softwood trees cut are being utilized. Very little softwood volume qualifying as growing stock is left in the woods. Sawmills use a greater portion of trees cut for saw logs now than formerly, and most of what is left is used for pulpwood. Usable volume in cut trees remaining in the woods amounts to only about 60,000 cords a year, most of it very rough, limby, and widely scattered. This material is not only costly to log but, because of small size and many knots, rather undesirable for pulpwood.

Also, about three-fourths of the residue from the manufacture of primary products from timber is now being used for pulpwood. Virtually all the coarse material (slabs and edgings) produced by sawmills is being utilized either for pulpwood or

for fuel.

In 1956, only 3,823 cords of pulpwood came from wood residues; by 1959, 134,080 cords, or nearly 7 percent of the total pulpwood production, came from wood residues, mainly pine slabs and edgings. This volume accounted for over half



In 1959, pulpwood chips equal to 122,900 cords of pine came from slabs and edgings produced by sawmills.

the total volume of coarse mill byproducts. Most of the remainder is used for domestic fuel.

Much of the increase in the use of slabs and edgings for pulpwood came from material formerly burned for fuel. The chances are good that a large part of the slabs and edgings now being burned will also be available for pulpwood as more and more sawmills install equipment to produce bark-free chips.

Hardwoods, in contrast to softwoods, are very poorly utilized. Not only are hardwoods poorer in quality than softwoods, but the users of hardwood timber are far more exacting in their requirements. The demand is mainly for logs that will make either high-grade lumber or veneer. About 18 percent of the hardwood timber cut is left in the woods. This volume is mainly tops that have little use except as fuel.

Only about half the hardwood volume transported to the mill is used in the manufacture of primary forest products. About 40 percent of the byproduct material is used, mainly as fuel. Only 10,889 cords of hardwood mill byproducts were

used for pulpwood in 1959.

# Change in Source of Naval Stores

In addition to wood products, Florida's forests are an important source of turpentine and rosin, usually referred to as naval stores.

At one time, gum gathered from living pine trees provided the sole source of turpentine and rosin,

but other sources now produce a large proportion of total naval stores. In 1936, three-fourths of the rosin and four-fifths of the turpentine was produced from gum. By 1950, less than half of the turpentine and rosin was produced from gum, and in 1959 other sources had replaced gum for all but 17 percent of the total production of turpentine and rosin.3 In 1935, 36 million trees were being worked for gum in Florida. By 1949, this number had dropped to 14 million trees, and in 1959 less than 3 million trees were being worked. Production in Florida is now concentrated almost entirely in the Northeast.

This decline in worked trees reflects competition from cheaper sources rather than a shortage of timber. Since 1935, the number of slash and longleaf pine suitable for turpentining has increased, and in 1959, Florida had nearly a half million acres of land suitable for turpentine operations that were not being worked. These are areas with 20 or more round longleaf and slash pine trees 10 inches d.b.h. or larger per acre. Trees on only 132,000 acres were being worked in 1959. A partial reason has been that some large landowners considered turpentining unprofitable or undesirable. A recent dramatic rise in prices, however, is altering this attitude.

Another important change is that present day turpentining no longer has the adverse effect on growing timber for wood products that it had in 1936. In 1936, turpentining practices made a large part of the volume in worked-out stands unfit for wood products. Today, such improved practices as bark chipping with acid, use of removable nails and tins, and confining turpentining to trees marked for early harvesting have made turpentining an important supplemental source of income from woodlands, with little or no interference with growing timber for wood products. In 1959, 92 percent of the faces in Florida were worked by gum producers participating in the Naval Stores Conservation Program. The program provides for the government and the producer sharing the cost of following approved conservation practices.

Seasoned pitch-soaked stumps left following the logging of the old-growth pine stands were the first to replace gum as a source of naval stores. In 1958, nearly two-thirds of the rosin and 29 percent of the turpentine were produced from pitch-soaked stumps. The use of stumps in Florida is expanding as stump supplies are being exhausted in certain other states. In 1958, seven plants in Florida and four plants in other states processed 793,000 tons of wood. At the present rate of consumption, there appears to be no immediate shortage of stumps in Florida. In 1959, the number of old-growth stumps totaled over 130.8 million, of which 75 percent is readily available, although the cost for stumps has jumped as much as threefold recently. Another 35.5 million will become available as timber now pre-

venting access is logged.

The uprooting of old pine stumps is essentially a mining operation. At the present time it appears unlikely that second-growth stumps, because of their smaller size and lower pitch content, will replace the old-growth stumps. Thus, eventually, the naval stores now produced from stumps must come from other sources.

As the supply of stumps is depleted, byproducts from the sulphate pulping process may be expected to replace in part at least the turpentine and rosin now coming from stumps. Turpentine distilled from sulphate vapors and rosin produced from tall oil have increased rapidly with the increase in sulphate pulping capacity. In 1959, pulpmills supplied half the turpentine and 20 percent of the rosin. The naval-stores-producing potential from pulpmills does not appear to be as great for rosin as for turpentine. Thus, as the old-growth stumps disappear, users of rosin may have to turn more and more to gum from pine trees to fill their needs.

Total consumption of naval stores products had changed little in the 25 years preceding 1959, but a sharp upswing in price and export demand has taken place since 1959. In the past, the Nation's industries have been using about 2 million 520-pound drums of rosin and 600,000 fiftygallon barrels of turpentine. For the six seasons from 1953 through 1958, U. S. rosin consumption exceeded production, and stocks declined by an average of about 40,000 drums per year. Free world production of paper and paper products, which represents the largest single application of rosin, advanced 9.4 percent in 1959 and by the first quarter of 1960 was 14.1 percent above the 1958 level. One entirely new element in the extraction of gum naval stores from trees is the possibility of "gum orchards." In such orchards, rows of planted pines, bred from genetically superior strains, could produce at least twice as much gum as wild stands, and at the same time cut labor costs. A trial orchard of this type has been established by the U.S. Forest Service on the Olustee Experimental Forest.

## TIMBER SUPPLY OUTLOOK

In many ways, the timber supply outlook is much brighter today than it was 25 years ago, or even 10 years ago. Protection from fire has greatly improved and some progress has been made in disease control. The State has twice as many pine trees. Annual growth has increased 39 percent. Improved turpentining practices have eliminated most of the losses arising from this source in 1936. Large areas are being cleared of shrubs and low-value hardwoods to make room for pine.

<sup>&</sup>lt;sup>3</sup> Source: Agricultural Marketing Service, USDA.



Crude gum from live pine trees is no longer the main source of turpentine and rosin.

Florida Forest Service photo

Today nearly two-thirds of the rosin comes from pitch-soaked pine stumps . . .



Florida Forest Service ph

and over half of the turpentine comes from pulpmills.

Florida Forest Service photo

Not all of the changes have improved the outlook, however. The State has less forest area and less volume in pine trees 13.0 inches and larger. In the past 10 years, the surplus growth in timber smaller than 13.0 inches failed to completely offset the overcutting of larger timber. Also, while the number of pine trees has increased, the increase in hardwoods has been twice as great. Large areas, which in 1936 supported pine stands, now support only shrubs and low-value hardwoods.

While the net result of past changes has been a substantial improvement in the timber supply outlook, merely maintaining past trends will not only fall far short of utilizing Florida's timbergrowing potential, but will also fail to provide the growth needed to sustain the upward trend in timber cut. Between 1936 and 1958, the cut of pine timber increased 34 percent. Maintaining this trend would mean another 33-percent increase in the cut by 1989. Yet a 30-year projection of the past average annual change in numbers of trees by 2-inch diameter classes would result in only a 9-percent increase in growth (table E).

A continuation of past trends will result in shortages of the largest and best-quality cypress and hardwood timber, but the supply of small, low-quality timber will continue greatly to exceed the demand.

Many of the factors influencing future trends may be expected to operate in the future as they have in the past, but much can be done to reinforce desirable trends and reverse those which are not.

# Natural Regeneration Outlook Less Favorable

The increase in pine growth during the past 24 years reflects almost entirely the favorable conditions for natural regeneration which resulted in

a rapid buildup of small timber.

The outlook for natural pine regeneration in the future is not nearly so favorable. Most of the increase in small pines took place between 1935 and 1949. The number of 4-inch trees more than doubled between 1935 and 1949, but between 1949 and 1959 the number increased only 24 percent. The smaller increase of only 13 percent in the number of 2-inch trees during the past 10 years suggests a further leveling-off of the regeneration rate and, consequently, of the growth rate.

This leveling-off of the increase in the number of small pines reflects a change in conditions favorable to natural regeneration. In 1935, cutting and large-scale turpentining coupled with frequent burning kept a large share of Florida's forest land poorly stocked. The sharp reduction in burning since 1935 created conditions favorable to natural pine regeneration, and pine seedlings became established in large numbers in the many openings in the forest stands. However, this increased

fire protection also favored the encroachment of hardwoods. The number of hardwood trees 1.0 inch or larger more than doubled. Pines were replaced by hardwoods over large areas.

Thus, by 1959, most of the land available for natural regeneration in 1935 had either become stocked with pine or was covered with hardwoods and brush. Consequently, Florida today has very little poorly-stocked land with conditions favorable to the natural regeneration of pine. In addition, out of the total 483,100 acres of flatwoods and upland area cut over annually during the 3-year period prior to 1959, 61 percent is poorly stocked and is not expected to restock with pine because of inadequate seed source or competing ground cover.

### Less Land Available to Grow Pine

The downward trend in forest area also has a bearing on the regeneration outlook, especially since land converted from forest to other uses in the past has been mainly land suited to growing pine. In the light of recent land-use trends, the shift from forest to other uses may increase. The increase in improved pasture and urban lands was much greater during the past 10 years than the previous 14. Florida will be fortunate to retain the commercial forest area it now has, and the chances are good that growing competition from other uses will further reduce the area available for timber-growing. This will require more efficient use of the remaining forest area just to maintain the current level of growth.

Table E. --Total timber growth and trend level of timber cut by species group for selected years

Item	1935	1948	1958	19891/
	<u>r</u>	Million c	ubic feet	
Pine:				
Net growth	156	192	217	236
Timber cut	157	188	211	234
Net change	-1	+4	+6	+2
Cypress:				
Net growth	32	25	38	41
Timber cut	48	26	10	35
Net change	-16	-1	+28	+6
Hardwoods:				
Net growth	64	80	94	132
Timber cut	38	32	28	86
Net change	+26	+48	+66	+46

 $<sup>\</sup>underline{1}/$  Projected data based on the average annual change in timber inventory between 1935 and 1959.



The area favorable to natural pine regeneration is decreasing. Many of the forest openings created by frequent wildfires have filled in with pine or lowvalue hardwoods in response to better fire protection.



Florida Forest Service photo

## Planting Outlook Favorable

Between 1937 and 1948, the number of pine seedlings planted annually averaged less than 5 million. Planting thereafter made spectacular gains. Pine seedlings planted since 1948 have averaged 91 million annually and during the 1959-60 season, 171 million. The number of pine seedlings planted in Florida between 1937 and 1960 is shown in the following tabulation:

Planting season	Thousand
1937-38. 1938-39. 1939-40. 1940-41. 1941-42. 1942-43. 1943-44. 1944-45.	4,703 5,339 7,752 8,314 5,218 3,004 2,217 2,608
1945-46. 1946-47. 1947-48. 1948-49. 1949-50. 1950-51. 1951-52. 1952-53. 1953-54. 1954-55. 1955-56.	473 10,680 19,777 27,171 16,798 19,856 45,134 72,773 65,012
1956-57. 1957-58. 1958-59. 1959-60.	177,516 185,590 197,495

This recent planting will not affect growth much for the next 15 to 20 years, but after 1980 plantations will begin to add substantially to the total growth. The full impact of the current planting program will not be felt until about 1990 and, even then, contribution to sawtimber growth will still be insignificant.

This growth from plantations will not be entirely an addition to the projected growth of 236 million cubic feet based on past natural regeneration. Planting in the future will replace a large part of the natural regeneration, partly because of the unfavorable conditions for natural regeneration and partly because of the increasing tendency of landowners to plant rather than risk incomplete stocking from natural regeneration.



Florida Forest Service photo

As conditions become less favorable for natural regeneration, landowners will have to depend more and more on planting to restock their forest land.



Florida Forest Service phot

## Large Area Needs Planting

In spite of past and probable future shifts from forest land to other uses, Florida still has extensive areas suitable for restocking to pine. Out of the total 19.6 million acres of commercial forest land, 14.6 million acres are upland and flatwood sites suitable for growing pine. Today, a very large part of this area is growing only a fraction of the pine timber it is capable of producing. Of the 14.6 million acres, 8.8 million acres, or 60 percent, are less than 40 percent stocked with growing stock, that is, trees which will now or prospectively qualify as sawtimber (table F). Practically none of this land is expected to restock adequately within the next 10 years. Very little of it has an adequate seed source, and more than half of this poorly-stocked land has a cover of low-value hardwoods, culls, and shrubs which must be removed before it can be planted or seeded.

In addition, timber cutting adds nearly 300,000 acres annually to this potential pine area in need of planting or direct seeding. This is 61 percent of the pine area cut over annually. In view of this annual increase in poorly stocked pine land which is not expected to restock naturally, it seems unlikely that natural regeneration is replacing the trees cut. It appears likely that in the future more and more planting will be required just to sustain the present stand. And for each tree cut, several trees must be planted to offset normal mortality from suppression, insects, and disease.

# Medium - Stocked Stands Need Improvement

Improving the productivity of medium- to wellstocked stands offers still another opportunity to increase growth. Florida has 3.4 million acres of pine sites which are now 40 to 70 percent stocked with growing stock — but on which low-value trees and shrubs control 20 percent or more of the area and prevent the stands from becoming fully productive (table G). The removal of this less desirable material from the stands would make growing space available for the development and more rapid growth of the remaining high-quality trees and, in many instances, for the establishment of additional trees.

The opportunity to improve productivity on 1.2 million acres of this area is especially favorable. The stands are now at least 40 percent stocked

Table G. --Commercial forest area by major treatment needed to improve stocking, 1959

Treatment	Commercial	forest area
	Thousand acres	Percent
No treatment:		
Pine sites Lowland sites	2,372.1 405.0	12. 1 2. 1
Total	2,777.1	14. 2
Stand improvement:		
Pine sites Lowland sites	3,444.3 2,874.3	17.6 14.6
Total	6, 318. 6	32. 2
Regeneration:		
Pine sites Lowland sites	8,804.1 1,686.0	45.0 8.6
Total	10, 490. 1	53.6
All commercial forest area	19, 585. 8	100, 0

Table F. --Commercial forest land potentially available for planting or direct seeding to pine, by site quality, 1959

Preplanting condition		Site quality			
r representing condition	Good	Fair	Poor	Total	
		Thousar	nd acres		
Site preparation not required:					
Commercial forest area, 1958 Increase due to cutting, 1958	730. 2 60. 3	1,568.5 53.1	1,536.6 33.6	3,835.3 147.0	
Total, 1959	790.5	1,621.6	1,570.2	3,982.3	
ite preparation required:					
Commercial forest area, 1958 Increase due to cutting, 1958	896. 8 45. 6	1,909.2 65.7	1,867.6 36.9	4,673.6 148.2	
Total, 1959	942.4	1,974.9	1,904.5	4,821.8	
All types, 1959	1,732.9	3, 596. 5	3, 474. 7	8, 804. 1	

with desirable trees which will produce a 16-foot log free of defect if under 15 inches d.b.h., or if more than 15 inches, a 24-foot log that is 90 percent or more usable for lumber. The undesirable material is largely low, shrubby vegetation that can be eliminated by prescribed burning. Also, the larger, low-quality timber is pine that can be sold for pulpwood to defray the cost of treatment.

The potential benefits from stand improvement are not so great on the remaining 2.2 million acres of partially productive pine sites. Although the stands are medium to well stocked, the present stand is of much lower quality; less than 40 percent of the area is stocked with select trees. Many landowners interested in obtaining prompt and complete restocking of their land may prefer to remove the present stand and take the action necessary to restock the area with pine.

Lowland sites in Florida offer fewer opportunities to increase productivity than the pine sites. Less than half a million acres are well stocked with desirable trees, mainly cypress and hardwoods; 1.7 million acres are less than 40 percent stocked with growing stock. The prospect for natural regeneration of desirable trees is very poor. The areas for the most part are densely covered with shrubs and cull trees, and the low, wet sites make the use of heavy machinery to remove the undesirable material difficult or impossible. Research is needed to develop practical and economical ways of improving the productivity of these sites.

Nearly 3 million acres of lowland sites, however, are at least 40 percent stocked with trees that qualify as growing stock. Prospective productivity in response to treatment, though better than on the poorly stocked lowlands, is still rather low. Very few trees qualify as desirable growing stock. Most of the trees barely qualify as sawtimber and are generally below the quality needed by the present hardwood-using industries. Many of the trees lack quality because of small size and will improve in quality with growth. The future of industries requiring high-quality hardwoods must depend to a large extent upon the improvement of these currently low-quality, partially-stocked lowland stands.





Most of Florida is well suited to growing pine, but today much of the area is either denuded or, more commonly, covered with cull trees and shrubs.



Successful regeneration on many poorly stocked areas will require site preparation.



Florida Forest Service photo

Each year, to insure prompt restocking, three out of every five acres cut over require planting, usually preceded by site preparation.



Florida Forest Service photo

Low-value trees and other unwanted material must be removed or deadened in many medium-stocked stands to make room for the better trees.



## Mortality Outlook

Currently, much of the volume of timber lost from mortality is in trees that die from suppression or overcrowding in dense unmanaged stands. In the future, better spacing, resulting from a greater dependence upon planting and intermediate harvest cuts, will reduce much of the loss from overcrowding. Frequent thinning and stand improvement will also reduce mortality by removing from the stand the least thrifty trees most sus-

ceptible to natural destructive agents.

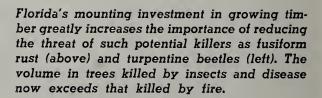
While intensive forest management will help reduce mortality from overcrowding, it can in some ways increase the threat of certain kinds of epidemic or catastrophic losses. Well-stocked, even-aged, single-species stands that are being developed under current management practices favor the buildup and spread of insects and disease. For example, thinned pine plantations are especially susceptible to losses from root rot caused by Fomes annosus. Trees are close enough together to permit F. annosus, which frequently invades freshly cut stumps, to spread to the remaining live trees through roots of stumps. Infected live trees often are killed or blown down. In some instances, root rot threatens the destruction of a large part of the residual stand following thinning.

Also, the lack of natural barriers and the added fuel provided by extensive areas of well-stocked pine stands increase the threat of severe and wide-

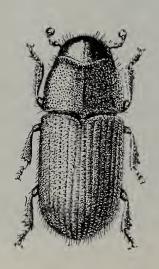
spread damage from fire.

As forest landowners spend more and more money to improve the productivity of their forest stands, protection from insects, disease, and fire becomes imperative in order to safeguard their investment. Research is needed to develop ways of insuring early detection and suppression of incipient epidemic flareups of insects and disease; also, advance plans for the prompt salvage of dead and dying trees are needed to reduce the impact of catastrophic losses from such forces as hurricanes.



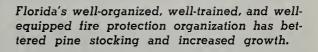








Florida Forest Service photo





TOWER L

# Forest Land Ownership Affects Outlook

The specific type of action required to influence future timber trends depends to a large extent upon the major interests of the people who own the land. Two-thirds of the commercial forest land in Florida is owned by nearly 100,000 owners who do not depend upon timber for their main source of income (table H). Over half of them are farmers who, on the average, own 160 acres of woodland. The remaining owners include merchants, lawyers, gum producers, mining companies, and land improvement companies.

Forest industries own 4.5 million acres or 23 percent of the forest area (table I). Most of this area (82 percent) is owned by pulp companies. The remaining 2.2 million acres (11 percent) is owned by public agencies. Half the land in public ownership is national forests; the remainder is about equally divided between the State of Florida and the Department of Defense, each owning

about a half million acres.

While productivity has improved in recent years, it is still far below potential on all classes of ownership. However, the productivity of land owned by public agencies and forest industries is significantly higher than farm woodlands and forest land owned by people not connected with forest industries. The average annual net growth on public land in 1958 was 17 cubic feet per acre, and on forest industry lands, 22 cubic feet per acre. In contrast, farm woodlands are producing only 13 cubic feet per acre per year, and other private lands, 14 cubic feet.

The better forest growth on industrial lands in part reflects higher potential productivity of the land. Growth per acre of well stocked land belonging to forest industries is 36 cubic feet per acre per year, compared to about 30 cubic feet for other ownerships. Less than 10 percent of industrial forest land is classed as poor site, compared to 28 percent of the farm woodlands and 23 percent of

other private ownerships.

The greater current productivity of public and industrial lands also reflects better stocking, partly in response to better management and also because better sites are generally more responsive to efforts to increase stocking. Current growth on lands of forest industry is 59 percent of the growth attainable if all the area were well stocked. In contrast, farm and other private lands are growing only about 45 percent of the growth of well stocked stands.

More intensive cutting in relation to growth has contributed to lower productivity on the farm and other private lands. In 1958, when timber cutting was well below the average of the preceding 10 years, pine cut on farm woodlands still exceeded the net growth (table J). On other ownerships, pine growth exceeded the cut by almost 50 percent.

The major effort needed to realize potential growth must be expended on farm woodlands and other private land (table K). Growth on at least three-fourths of the forest land in Florida could be increased. On half of the forest area, regeneration, mainly to pine, is needed. The presence of low-value timber impedes growth on another 6.3 million acres, and stand improvement is needed. Such improvement would not only result in stands better stocked with desirable timber but would greatly reduce mortality losses and up the growth rate by permitting harvest of the least thrifty trees.

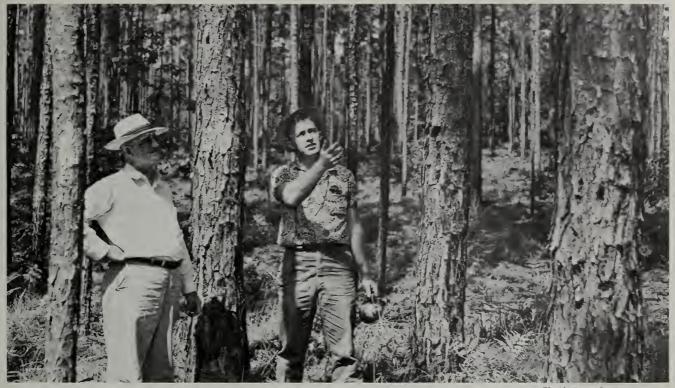
The increase in stocking and reduction in mortality that would follow from carrying out the needed regeneration, stand improvement, and measures to reduce mortality losses should result in at least the gross growth now being attained with well stocked stands and a reduction in mortality to 15 percent of the gross growth. This would mean an increase in growth from the current 312 million cubic feet to 846 million cubic feet — nearly 3 times current growth. However, only a third of this potential increase in growth can be realized from public and industrial forest lands, where the prospects for intensive forest management are good. On other ownerships, unless past and current trends are reversed, productivity will continue to decrease. The realization of the potential growth on this area represents over three-fourths of the State's pine regeneration job

Table H. --Percent of commercial forest area, net growth, timber cut, and potential net growth by ownership

and over half the stand improvement job.

Class of owner	Forest area	Timber cut	Current growth	Potential 1/growth
Public	11	11	12	11
Forest industries	23	30	31	26
Farm	28	30	23	26
Other private	38	29	34	37
All owners	100	100	100	100

<sup>1/</sup> As indicated by the percent that current growth is of the growth of well-stocked stands.



Florida Forest Service photo



Florida Forest Service photo

Farmers and other private owners not connected with forest industries need help from both the wood-using industries and public agencies to make their land grow more and better-quality timber.

Table I. --Commercial forest area by ownership and site quality, 1959

(In thousand acres)

Class of owner	Si	Total		
Class of Owner	Good	Fair	Poor	
Public	744.5	782.4	690.7	2,217.6
Forest industry	2,296.1	1,774.6	439.1	4,509.8
Farm	1,303.0	2,567.2	1,504.4	5, 374.6
Other private	2,229.6	3,514.6	1,739.6	7, 483.8
All owners	6,573.2	8,638.8	4,373.8	19, 585.8

Table K. --Major action needed to increase productivity, and possible increase in growth resulting from treatment, by ownership

Class of owner	Major tı	Potential 2/	
	Regen- eration 1/	Stand improvement	additional growth
	Thousa	Million cu. ft.	
Public	1, 107	823	55. 8
Forest industry	1,700	1,791	122. 3
Farm	3, 375	1,530	146. 1
Other private	4, 308	2, 175	210.1
All owners	10, 490	6, 319	534.3

 $<sup>\</sup>underline{1}/$  Exclusive of 1.4 million acres of idle and abandoned cropland.

Table J. --Growth, mortality, and timber cut, by ownership and species group, 1958 (In million cubic feet)

Class of owner	Species group	Gross growth	Mortality	Net growth	Timber cut
Public	Pine	45. 7	13, 5	32, 2	15, 8
	Cypress	2.7	. 8	1.9	4.1
	Hardwoods	5.8	3. 0	2.8	. 3
	Total	54.2	17.3	36.9	20, 2
Forest industry	Pine	98. 9	29.6	69. 3	51.2
	Cypress	14.8	4.9	9.9	. 2
	Hardwoods	38, 3	20.1	18, 2	5,6
	Total	152.0	54. 6	97.4	57.0
Farm	Pine	60.0	17. 9	42.1	44.3
	Cypress	14.8	4.9	9.9	2.5
	Hardwoods	40.1	21.1	19.0	10.9
	Total	114.9	43.9	71,0	57.7
Other private	Pine	97.3	29. 1	68. 2	48. 2
	Cypress	20.5	6.8	13. 7	. 3
	Hardwoods	52.0	27. 4	24, 6	5.9
	Total	169.8	63. 3	106.5	54.4
All owners	Pine	301.9	90.1	211.8	159. 5
	Cypress	52.8	17.4	35.4	7. 1
	Hardwoods	136.2	71.6	64.6	22.7
	Total	490.9	179.1	311, 8	189.3

<sup>2</sup>/ Based on bringing growth of all stands up to current growth of well stocked stands plus reducing mortality to 15 percent of gross growth.

# **Appendix**

## ACCURACY OF FOREST SURVEY ESTIMATES

Forest-resource information collected by the Forest Survey includes estimates based on samples having an associated sampling error. A large enough sample is taken to keep the sampling error below a specified minimum for forest area and timber volume. Nonsampling errors, such as may arise from mistakes in judgment, measurement, recording, and compilation, are kept to a minimum through training, supervision, field check cruises, and complete editing and machine verification in compiling the data.

## Forest Area

Estimates of forest area were based on the classification of 161,486 sample points systematically spaced on aerial photographs, followed by a ground check of 7,092 of these points to adjust for changes in land use since the date of photography. The sampling error for the 20 million acres of commercial forest area in the State is 0.48 percent.

State and Unit forest areas by ownership shown in table 2 of the appendix are compiled from ownership records and do not have sampling errors. Other estimates of forest areas, such as forest area by forest type, stand size, stocking, and ownership by the above detail are based on the 5,197 ground forest plots and have a sampling error. Thus, ownership breakdowns based on the plots will differ slightly from those based on compilations from records.

The sampling error of forest area breakdowns depends upon the proportion that the breakdown is of the forest area and the proportion that the forest area is of the total land area in the State.

Sampling errors for areas smaller than the State total and for forest proportions other than 56.3 percent can be obtained by referring to figures 4 and 5. For example, there are 5,722,000 acres of commercial forest land in Northwest Florida. This represents 79 percent of the total land in Northwest Florida. The lower curve in figure 5 shows that the sampling error of 79 percent is 0.276 percent for the State as a whole. Since Northwest

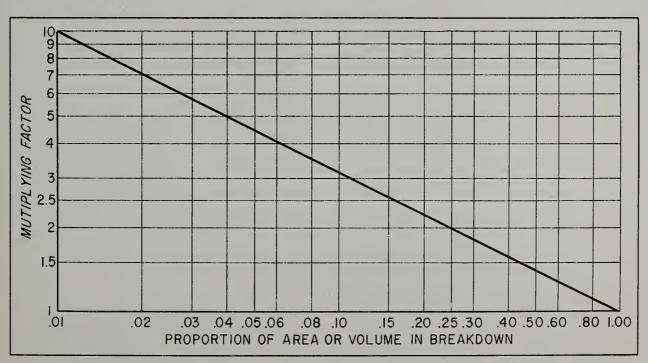


Figure 4.—Ratio of standard error of an area or volume breakdown to the percentage error of the estimate of total area or volume.

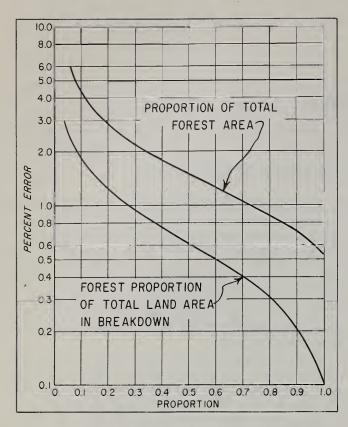


Figure 5.—Percent standard error by proportion of land area and commercial forest area.

Florida has only 29 percent of the State's commercial forest land, this sampling error must be multiplied by the factor 1.85 obtained from figure 4. Therefore, the sampling error of the 5,722,000 acres is 0.276 x 1.85, or 0.51 percent.

Similarly, the sampling error may be determined for the estimate of forest area in a single county. Commercial forest occupies 525,900 acres in Levy County, 75 percent of the land area. This is 2.7 percent of the State's commercial forest. The sampling error of this acreage is 0.31 percent x 6.1,

or 1.9 percent.

The sampling error for breakdowns for all forest area in the State may be obtained from the upper curve in figure 5. For example, the proportion of the forest area that is pine and oak-pine type in Florida is 11,579.3 ÷ 19,585.8, or 0.591. The sampling error of this breakdown is 1.26 percent using only figure 5. When the type breakdown is for less than the entire State, both tables must be used. Northwest Florida has 3,271,400 acres of pine and oak-pine type, 57.2 percent of the commercial forest land. Since Northwest Florida has only 29 percent of the State's commercial forest land, the sampling error of 1.3 from figure 5 must be multiplied by the factor 1.85 from figure 4.

Thus, the sampling error is 2.4 percent. The sampling error is slightly higher when the forest proportion is lower than the State average of 56.3 percent and slightly lower when above this average. This difference through the range of forest proportions in the State represents a very small part of the total sampling error and for all practical purposes can be ignored.

## Timber Volume

Estimates of inventory volume and growth are based on measurements recorded at 5,197 of the photo points classed as forest land. Sampling errors for the entire State and per billion units of volume are shown below:

Estimate Total (Per billion (Percent))
Growing stock volume
Cubic feet or cords 2.04 5.58
Board feet 2.15 10.19
Net cubic-foot growth 1.64 0.91

Estimates for detailed breakdown or for areas covering less than the State have larger sampling errors. The sampling error for part of the total is obtained by applying the appropriate multiplying factor corresponding with the proportionate part of the total to the total error for the State (fig. 4). For example, the sampling error for the volume of pine growing stock in cubic feet is  $2.04 \times 1.51$ , or 3.08 percent. The multiplying factor of 1.51 corresponds to the proportion of pine in the growing stock volume  $(3,243.0 \div 7,483.2, \text{ or } 0.43)$ . The sampling error for the 1,274.5 million cubic feet of pine growing stock in Northwest Florida (17.0 percent of the State total) is  $2.04 \times 2.4$ , or 4.9 percent.

Sampling errors for net growing stock volume range upward from a low of 9.4 percent for Liberty County with 4,795,000 cords. The sampling errors for individual county statistics are too high to be useful; they are presented by county to permit adding any combination of counties together until the total is large enough to meet the desired degree of reliability. To obtain an estimate with a sampling error of 10 percent, data for enough counties must be added together to total

about 4.1 million cords on the average.

# HOW THE FOREST INVENTORY IS MADE

Forest statistics in Florida were estimated from a double sampling scheme. A large number of points on aerial photos were examined and classified by land use. A much smaller subsample of these points was selected for examination on the ground. The detailed procedure was as follows:

1. Preliminary estimates of the acreage of land in forests and other land-use classes were obtained by classifying points printed on every third aerial photograph in alternate flight lines within a county. The proportion of points falling in each class was used to estimate the acreage. This estimate was later checked and revised through the

use of ground plots.

2. Ground sample plots were selected in a systematic manner from the forest land classifications made in Step 1, using an interval which would provide sufficient plots to meet established limits of error per billion cubic feet of timber. This resulted in a proportional sample of all existing timber stands. Field crews recorded measurements and observations on several types of plots superimposed at each location. The basic plot was a variable plot with a basal area factor of 10 square feet per acre on which timber volume, quality, mortality, and crown density were recorded. The tally of timber cut and of wood naval stores stumps was made on a 1/5-acre circular plot. The tally of seed trees was made on a variable plot having a basal area factor of 3.14. Crown density and stocking of brush and seedlings were recorded on a line sample extending 1/2 chain north and south of plot center and from 10 quadrats of 1 milacre each along this line. Samples of photo land-use classifications other than forest land were also checked on the ground to verify or adjust the area estimates based on these classi-

3. Growth estimates were based on increment borings taken on all tally trees 4.0 inches at d.b.h. and larger except live oak and palm. The volume of timber cut by product in 1958 was obtained from a production survey and from utilization studies. The breakdown of the timber cut by size was computed from a tally of the stumps of trees cut on the plots during a specified period.

4. All field data were sent to Asheville for editing and were placed on punch cards for machine computing, sorting, and tabulation. Final estimates were based on statistical summaries of

the data.

### **DEFINITION OF TERMS**

#### Land-Use Classes

Forest land: Areas of one acre or more (a) which are at least 10 percent stocked with trees

including seedlings and larger of both commercial and noncommercial species. Excludes vines, shrubs, etc., and (b) from which trees have been removed to less than 10 percent stocking but which have not been developed for other uses. Narrow strips less than 120 feet wide, even though area is an acre or more, are excluded. Also excludes areas around home sites and barns that are occupied by ornamental trees or trees used for shade. Orchard trees are not included in computations for stocking.

Commercial: Forest land which is (a) producing, or physically capable of producing, trees with one sound saw log at least 8 feet long, (b) economically accessible now or in the foreseeable future, (c) not withdrawn from timber utilization, such as parks and watersheds.

Noncommercial: All other forest land that

does not qualify as commercial forest.

Unproductive: Noncommercial forest land which is not capable of producing trees with one sound saw log at least 8 feet long, or that are economically inaccessible.

Productive-reserved: Noncommercial forest land which is capable of producing trees with one sound saw log at least 8 feet long but which has been withdrawn from timber utilization, such as parks and watersheds.

Nonforest land: Includes all land not qualifying as forest and water areas under 40 acres, and strips of water less than 660 feet wide. Also includes improved (graded) roads and railroads.

Cropland: Nonforest land which has been cultivated within the past two years. Also includes tended orchards and yards of occupied farm homes. Excludes land being developed for permanent pasture even though it has been cultivated within the past two years.

Improved pasture: Nonforest areas that are fenced, are less than 10 percent stocked with trees, and show evidence that an attempt is being made to maintain a sod of forage species.

Idle or abandoned cropland: Includes cropland and orchards not cultivated or tended in the past two years, abandoned farm home sites, and nonforest land that no longer qualifies as improved pasture because of lack of maintenance.

Marsh or prairie: Low, wet areas characterized by heavy growth of reeds and grasses without tree growth. Also includes upland meadows or prairies where timber does not grow

naturally.

Urban and other: Areas occupied by cities and towns, suburban areas developed for residential or industrial purposes, school yards, cemeteries, mines, quarries, airfields, roads, railroads, other cleared rights-of-way, and nonforested sand dunes and beaches. Excludes extensive areas of forested land within legal boundaries of cities and towns which have not been developed for other purposes and are available for production of timber. Includes town parks.

## Ownership Classes

National forest: Includes Federally-owned land within the boundaries of the national forests.

Indian: Federal Indian reservations.

Bureau of Land Management: Includes public domain lands.

Other Federal: Includes military reservations, wildlife refuges, etc.

State: Includes state forests, etc.

County and municipal: Includes parks, water-

sheds, etc.

Pulp and paper companies: Includes land owned in fee simple by pulp and paper companies. Excludes leased lands.

Other wood-using industries: Includes land owned by all industries, except pulp and paper companies, that use round wood as raw material, such as sawmills, veneer plants, handle mills, etc.

Farm: Includes forest land on private farms defined as a privately-owned tract of land 3 acres or larger, exclusive of home garden products, producing agricultural products valued at \$150; or a smaller tract producing and selling agricultural products for \$150 or more per year. Agricultural products include field crops, vines, orchards, ornamental plants, rabbits, bees, fur-bearing animals, poultry, and common farm animals. Not included are "fish farms," fish hatcheries, "oyster farms," and "frog farms." Also includes forest land owned by a farmer but not producing agricultural products if the total area owned does not exceed 1,000 acres. Excludes farmer-owned areas that exceed 1,000 acres and less than 10 percent of the total is used to produce agricultural products.

Miscellaneous private: Includes all forest land on ownerships not included under the above classi-

fications.

### Stand Size

Heavy sawtimber stands: Stands containing a net volume of 5,000 board feet or more (Int. ¼-inch rule) per acre.

Light sawtimber stands: Stands containing a net volume of 1,500 but less than 5,000 board feet per

acre

Poletimber stands: Stands failing to qualify as sawtimber but at least 10 percent stocked with poletimber and sawtimber and with at least 5 percent of the stocking in poletimber.

Seedling and sapling stands: Stands not qualifying as sawtimber or poletimber but having at least 10 percent stocking of growing stock, and with at least 5 percent of the stocking in seedlings and saplings

Nonstocked and other areas: Commercial forest areas not qualifying as sawtimber, poletimber, or seedling and sapling stands. Includes denuded

areas and areas stocked with culls.

## Stocking

Stocking is a measure of the degree to which growing space is effectively utilized by trees.

The stocking of trees tallied (trees 1.0 inch and larger) was based on crown measurements of sound, free-growing trees. Understory trees, trees with less than 50 percent of their crown area exposed to direct light from above, were not used in determining stocking. For softwoods, stocking was equal to 3 times the crown area for 2-inch saplings, 2 times the crown area for 4-inch saplings, and 1.7 times the crown area for trees 5.0 inches and larger. For hardwoods, stocking was equal to the crown area.

The stocking of sound seedlings is based on 10 quadrats of 1 milacre each along the 1-chain transect. Each stocked milacre quadrat completely free from overtopped trees 1.0 inch and larger

counted as 10-percent stocking.

Well stocked: Areas 70 percent or better stocked

with growing stock.

Medium stocked: Areas 40 to 70 percent stocked with growing stock.

Poorly stocked: Areas less than 40 percent stocked with growing stock.

## Forest Types

Forest type is based on the crown density of live, free-growing trees from the variable plot tally and the free-growing seedlings from the line sample.

Softwood types: Stands with longleaf, slash, loblolly, spruce, pond, sand, or shortleaf pine and redcedar making up 50 percent or more of the

crown density.

Oak-pine type: Stands with yellow pines or redcedar making up at least 25 percent but less than 50 percent of the crown density. The remaining cover is usually hardwoods, but may include cypress, other softwoods, or cabbage palmetto.

Hardwood types: Stands with yellow pines or redcedar making up less than 25 percent of the

crown density.

Upland hardwood types: Hardwood stands with upland species such as oaks, hickory, yellow-poplar, and gum making up 50 percent or more of the hardwood crown density, but with scrub oak making up less than 50 percent of the hardwood crown density.

Scrub oak type: Hardwood stands with scrub oak making up 50 percent or more of the hard-

wood crown density.

Bench hardwood type: Hardwood stands in the choice bottomland or stream-margin sites with cherrybark oak, swamp chestnut oak, and shumard oak, sweetgum, yellow-poplar, and other associated species making up 50 percent or more of the hardwood crown density.

Water oak-gum type: Hardwood stands in moist riverbottom or stream margin sites with water oak, laurel oak, willow oak, elm, red maple, blackgum, and associated species making up 50 percent or more of the hardwood crown density. In the broad riverbottoms this type usually occupies the upper portion of the first bottom between the wet gum-cypress sites and the bench hardwood sites. In narrow riverbottoms it may be the only type present.

Gum-cypress type: Hardwood stands with water tupelo, blackgum, cypress, and whitecedar making up 50 percent or more of the hardwood crown density. Does not include upland stands with 50 percent or more of the crown density

in blackgum.

Palm type: Stands with cabbage palmetto making up 50 percent or more of the crown density but with yellow pine or redcedar making up less

than 25 percent of the crown density.

Flatwoods and uplands: Areas supporting pine, oak-pine, upland hardwood and scrub oak types. Lowlands: Areas supporting bench hardwood, water oak-gum, gum-cypress and palm types.

# Site Quality Classes

Site quality classes for pine and oak-pine types are determined from an index based on the height of the dominant and codominant trees at 50

Poor site: Site index of 60 or less for loblolly pine type and site index of 50 or less for all other pine types and all oak-pine types, including oakloblolly pine type.

Fair site: Site index of 70 for loblolly pine type and site index of 60 for all other pine types and

all oak-pine types.

Good site: Site index of 80 or greater for loblolly pine type and site index of 70 or greater for all other pine types and all oak-pine types.

Site quality classes for hardwood types are based on the average length of the saw-log portion

at maturity.

*Poor site:* Evidenced by stands of poor growth and scrubby form producing short-boled timber with an average length of one 16-foot log or less; usually found on dry sites or poorly drained flats with underlying hardpan.

Fair site: Evidenced by stands of average height and form where the trees may be expected to produce an average merchantable length of two 16-

foot logs.

Good site: Evidenced by hardwood stands of the best form and species and capable of producing trees with a merchantable length of three 16-foot logs or more. Such sites are usually found in bottoms of deep, well-drained soils, although cypress and tupelo may be found growing on good sites in swampy, wet areas.

## Area Condition Classes

Class 1: Areas 70 percent or more stocked with desirable trees.

Class 2: Areas 40 to 70 percent stocked with desirable trees and with less than 20 percent of the area controlled by inhibiting vegetation or surface conditions that will prevent occupancy by desirable trees.

Class 3: Areas 40 to 70 percent stocked with desirable trees but with 20 percent or more of the area controlled by less desirable cover such as poor growing stock, limited-use, rough and rotten trees or shrubs. Also includes all other areas 40 percent or more stocked with growing stock.

Class 4: Areas less than 40 percent stocked with growing stock and with adequate seed source and seedbed favorable to natural restocking. Includes upland and flatwood areas with at least 5 pine seed trees per acre and less than 20 percent of the

area controlled by inhibiting vegetation.

Class 5: Areas less than 40 percent stocked with growing stock and with inadequate seed source and/or seedbed unfavorable to natural regeneration. Includes upland areas with less than 5 pine seed trees per acre and 20 percent or more of the area controlled by inhibiting vegetation, and all lowlands less than 40 percent stocked with growing stock.

# Stand Treatment Classes

No treatment: Stands ready for harvest, stands in highly productive condition, and stands where there is little or no practical opportunity to increase harvest yields by cultural measures. Includes area condition classes 1, 2, and 4.

Stand improvement: Stands where cleaning, thinning, killing of cull trees, sanitation or salvage cutting, or pruning will be primarily effective in increasing yields of desirable trees. Includes area

condition class 3

Regeneration: Areas where planting, seeding, site preparation, removal of inhibiting vegetation, or other measures to obtain natural or artificial regeneration will be primarily effective in increasing yields of desirable trees. Includes condition class 5.

# Class of Timber

Desirable trees: Trees of high vigor and low risk that do not have defects that limit their present or potential use for high-quality timber products such as veneer logs and choice saw logs.

Desirable sawtimber trees: Sawtimber trees

which meet the following requirements:

1. Trees 15.0 inches d.b.h. or larger with at least 32 feet of saw-log portion free of rot, sweep, crook, or other defect causing loss of board-foot volume. Trees under 15.0 inches d.b.h. with at least 24 feet of saw-log portion free of board-foot cull.

- 2. Softwood trees 15.0 inches d.b.h. or larger with one saw log 8 feet or longer qualifying as grade 2 or better. Softwood trees under 15.0 inches with one log qualifying as grade 3 or better. Hardwoods must have one log of grade 3 or better.
- 3. Trees that are vigorous and show no evidence of risk of mortality and have a complete crown of live limbs. Boles are neither hollow nor have an exposed rotten area over 4 inches in width. May include turpentined trees if they have not been idle or worked out as long as 5 years and do not have a burned turpentined face.

Desirable poletimber trees: Poletimber trees

that meet the following requirements:

1. Trees free of stem deformities that would prevent having 24 feet of cull-free saw-log portion upon reaching saw-timber size.

2. Hardwood trees with at least an 8-foot stem section meeting the grade 3 re-

quirements for clear cuttings.

3. Trees that are vigorous and have a complete crown of live limbs and have boles that are not hollow or contain exposed rotten wood.

Desirable seedlings and saplings: Includes trees of the following species unless so obviously deformed and defective or are on such a poor site that they are not expected to develop into sawtimber:

Longleaf pine
Slash pine
Spruce pine
Loblolly pine
Shortleaf pine
Pond pine
Cypress

Water tupelo
Yellow-poplar
Sweetgum
Magnolia
White oak
Swamp chestnut oak
Cherrybark oak
Shumard oak

Growing stock: Trees of commercial species that now or prospectively qualify as sawtimber. In-

cludes desirable trees.

Sawtimber trees: Softwood trees 9.0 inches d.b.h. or larger and hardwood trees 11.0 inches d.b.h. or larger of commercial species with boardfoot defect not exceeding 50 percent of the gross volume in the saw-log portion. The tree must have an 8-foot log meeting the minimum requirements for log grade 4 (see tree grades in next section hereunder).

Saw-log portion: The section of the bole of a sawtimber tree from the stump to the upper limit of merchantability for saw logs. The upper limit is a fixed percent of d.b.h. except where, because of roughness or other defects, sections below the minimum top diameter fail to meet the minimum requirements for saw

Upper stem: The section of the bole or main stem of a sawtimber tree extending from the top of the saw-log portion to a point 4.0 inches inside the bark.

Poletimber trees: Trees of commercial species from 5.0 inches d.b.h. up to sawtimber size which

are expected to qualify as sawtimber.

Seedling and sapling trees: Trees of commercial species less than 5.0 inches d.b.h. which show promise of qualifying as sawtimber. Seedlings exclude longleaf pine that do not measure ½-inch at ground level, other softwoods less than 0.5 foot high, and hardwoods less than 1.0 foot high.

Sound cull trees: Live trees that do not qualify as growing stock but sound wood makes up 50 percent or more of the gross cubic-foot volume.

Rotten cull trees: Live trees that do not qualify as growing stock and sound wood makes up less than 50 percent of the gross cubic-foot volume.

Hardwood limbs: Includes section of limbs from the base of the bole to a point 4.0 inches

inside the bark.

Salvable dead trees: Standing or down dead trees that are considered currently or potentially merchantable. This is obtained by multiplying the percent that the annual timber cut is of the total growing stock inventory by the total number of growing stock trees that die annually.

#### Tree Grades

Tree grades are based on the log grade of the butt log graded according to standards presented in:

1. Interim log grades for southern pine. South. Forest Expt. Sta., 18 pp. 1953.

2. Hardwood log grades for standard lumber: proposals and results. U. S. Forest Products Laboratory D1737. 1949.

Hardwood log grades include, in addition to the hardwood log grades for standard lumber, a grade 4 tie and timber log. A grade 4 hardwood log must be sound internally (cannot have a rotten center), and no single knot or group of knots within a 6-inch section of the log can exceed one-third the log diameter at that point. Rotten defects or holes can be present on the surface of the log, but they must not extend more than 3 inches into the potential tie or timber. Sweep departure cannot exceed one-fourth the log scaling diameter per 8 feet of length, and departure of crook cannot exceed 50 percent of the gross board-foot volume.

#### Diameters

D.b.h. (diameter at breast height): Stem diameter in inches, outside bark, measured at

4½ feet above the ground.

Diameter class: All trees were tallied by 0.1inch diameter classes and tabulated by 2-inch diameter classes, each 2-inch class including diameters 1.0 inch below and 0.9 inch above the stated midpoint, e.g., trees 7.0 to and including 8.9 inches are included in the 8-inch diameter class. Corresponding limits apply to other diameter classes.

# Volume Estimates

Board-foot volume: The volume in board feet, measured by the International 1/4-inch rule, exclusive of defect, of that portion of sound sawtimber trees between the stump and the upper

limit of merchantability for saw logs.

Volume in cords: For sound trees the volume in standard cords (including bark) of the sound portion of trees 5.0 inches d.b.h. or larger, between stump and a minimum top stem diameter of 4.0 inches inside bark. Similar volumes are given for cull trees. The volume in limbs which are at least 4.0 inches in diameter inside bark is shown

Volume in cubic feet: Cubic-foot volume of the same material shown in cords except that bark is

not included.

International ¼-inch log rule: A rule for estimating the board-foot volume of 4-foot log sections, according to the formula V = 0.905 (0.22D<sup>2</sup> - 0.71D). The taper allowance for computing the volume in log lengths greater than 4 feet is 0.5 inch per 4-foot section. Allowance for saw kerf is 1/4-inch.

Standard cord: The solid wood content, exclusive of bark, of a stacked pile 4 x 4 x 8 feet of round or split bolts. See "Conversion Factors" for

cubic-foot content.

# Growth and Timber Cut

Gross growth: The growth on trees that were of volume size at the beginning of the year and the ingrowth resulting from smaller trees growing into volume size during the year.

Mortality: The net volume in trees dying from

natural causes during the year.

Net growth: Gross growth minus mortality.
In board feet: The change during the calendar year in sawtimber volume resulting from growth, ingrowth, and mortality losses.

In cubic feet or cords: The change during the calendar year in the volume of all trees 5.0 inches and larger resulting from growth,

ingrowth, and mortality losses.

Timber cut: The volume of timber cut by product for 1958 is based on a canvass of all woodusing industries in the State. The size breakdown of the cut is based on the measurement and tally of stumps found on regular ground sample plots. Stumps of all trees cut during the preceding 3-year period were measured. Timber cut from cull or dead trees is not included.

#### Conversion Factors

CUBIC FEET OF WOOD PER AVERAGE CORD (EXCLUDING BARK)

D. b. h.	Pine	Cypress	Hardwoods
6	58.8	65.8	57.0
8	67.1	74.6	65.8
10	72.5	80.0	72.0
12	75.8	84.0	75.7
14	78.7	87.0	78. 1
16	80.6	89.3	80.0
18	82.6	90.9	81.3
20	84.0	92.6	82.0
22	84.7	94.3	82.5
24	86.2	96.1	82.7
26	87.7	97.1	83.0
28	89.3	98.0	83.0
30	90.1	99.0	83.0
Average	71,6	74.4	74. 1

BOARD FEET PER CUBIC FOOT OF GROWING STOCK (ENTIRE STEM)

10	4.60	3, 38	
12	4.62	3, 80	4.13
14	4.86	4.23	4.33
16	5.14	4.65	4.62
18	5.31	4.80	4.69
20	5.38	5.09	4.78
22	5.90	5.26	5.03
24	6.30	5.36	4.58
26	5.90	5.77	5.54
Average	4. 75	4, 12	4.59

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State	Northeast	Northwest	Central	South
19,585.8	7, 167. 2	5,722.0	4,825.1	1,871.5
ıd:				
1,337.0	61.3	16.8	108.8	1, 150. 1
93.0	12.4	4.3	21.9	54. 4
21,015.8	7, 240.9	5, 743. 1	4,955.8	3, 076.
2,493.6	667.3	623.9	927.1	275.3
2, 383.1	461.6	188.0	1,229.2	504.
1,047.3	397.2	220.9	241.7	187.
6,091.3	456.7	167.4	1,995.3	3, 471. 9
1,786.0	413.0	315.4	636.5	421.
13, 801. 3	2, 395.8	1,515.6	5,029.8	4,860.
34, 817. 1	9,636.7	7, 258. 7	9,985.6	7,936.
	19, 585. 8 dd:  1, 337. 0 93. 0 21, 015. 8  2, 493. 6 2, 383. 1 1, 047. 3 6, 091. 3 1, 786. 0 13, 801. 3	19,585.8 7,167.2  dd:  1,337.0 61.3 93.0 12.4  21,015.8 7,240.9  2,493.6 667.3 2,383.1 461.6  1,047.3 397.2 6,091.3 456.7 1,786.0 413.0  13,801.3 2,395.8	19,585.8 7,167.2 5,722.0 dd:  1,337.0 61.3 16.8 93.0 12.4 4.3  21,015.8 7,240.9 5,743.1  2,493.6 667.3 623.9 2,383.1 461.6 188.0  1,047.3 397.2 220.9 6,091.3 456.7 167.4 1,786.0 413.0 315.4  13,801.3 2,395.8 1,515.6	19,585.8 7,167.2 5,722.0 4,825.1 dd:  1,337.0 61.3 16.8 108.8 93.0 12.4 4.3 21.9 21,015.8 7,240.9 5,743.1 4,955.8   2,493.6 667.3 623.9 927.1 2,383.1 461.6 188.0 1,229.2 1,047.3 397.2 220.9 241.7 6,091.3 456.7 167.4 1,995.3 1,786.0 413.0 315.4 636.5 13,801.3 2,395.8 1,515.6 5,029.8

<sup>1/</sup> From U. S. Bureau of the Census, land and water areas of the United

Table 2. -- Commercial forest land, by ownership and Survey Unit, Florida, 1959 (In thousand acres)

Ownership class	State	Northeast	Northwest	Central	South
National forest	1,027.1	418.3	542.9	65.9	
Other Federal:					
Indian Bureau of Land	18.9				18.9
Management Other	2.8 588.4	0.4 10.7	0.5 497.4	1.9 77.5	2.8
Total	610.1	11.1	497.9	79.4	21. 7
Other public:					
State County and municipal	539.6 40.8	150.3 9.6	191.2 3.7	114.4 10.9	83.7 16.6
Total	580.4	159.9	194.9	125, 3	100.3
Forest industry:					
Pulp company Other wood-using	3,713.9	2, 085. 1	1,626.2	2.6	
industries	795.9	450.9	251.6	93.4	
Total	4,509.8	2,536.0	1,877.8	96. 0	
Farm	5, 374.6	1, 285. 8	1,017.6	2,508.6	562.6
Miscellaneous private	7, 483. 8	2,756.1	1,590.9	1,949.9	1, 186. 9
Total commercial	19,585.8	7, 167. 2	5,722.0	4,825.1	1,871.5

Table 3. -- Commercial forest land, by ownership, stand size, and stocking, Florida, 1959

			(In the	usand acres)					
Stand size and stocking	A11 ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest	Farm	Misc. private
Heavy sawtimber stands:									
Well stocked Medium stocked Poorly stocked	805. 0 259. 2 55. 8	67.3 19.6 4.1	 	 	14. 2 3. 5	26.6 15.3	281.3 69.9 12.1	161.8 57.5 8.9	253, 8 93, 4 30, 7
Total.	1,120.0	91.0			17.7	41.9	363, 3	228.2	377.9
Light sawtimber stands:									
Well stocked Medium stocked Poorly stocked	1,485.6 1,119.4 508.7	142.2 76.1 22.6	  	 	24. 5 21. 6 15. 9	51.7 29.7 27.2	455.4 350.7 129.3	370.9 219.1 142.7	440.9 422.2 171.0
Total	3, 113. 7	240.9			62.0	108.6	935.4	732.7	1,034.1
Poletimber stands:									
Well stocked Medium stocked Poorly stocked	1,870.7 1,411.5 1,205.2	146.2 90.4 71.8	4.7	0.1 1.6	33. 2 43. 5 57. 6	44.4 38.7 41.5	528.0 386.6 253.8	367.8 370.3 323.1	751. 1 477. 2 455. 8
Total	4,487.4	308.4	4.7	1.7	134. 3	124.6	1, 168.4	1,061.2	1,684.1
Seedling and sapling stands:									
Well stocked Medium stocked Poorly stocked	905.2 1,066.9 1,994.1	79.3 27.3 115.2	 	0. 1 0. 4	15.1 10.2 51.8	27.5 37.3 61.5	314.9 401.8 441.8	159.4 244.4 515.9	309.0 345.8 807.5
Total	3, 966. 2	221.8		0.5	77, 1	126. 3	1, 158.5	919.7	1, 462. 3
Nonstocked and other areas	6,898.5	165.0	14.2	0.6	297. 3	179.0	884.2	2,432.8	2,925.4
All classes	19, 585. 8	1,027.1	18.9	2,8	588.4	580. 4	4,509.8	5, 374. 6	7, 483. 8

<sup>1/</sup> From U. S. Bureau of the Census, faint and water areas of the Canal 2/ Includes 803, 600 acres of water according to Survey standards but defined by the Bureau of the Census as land area. Also includes 4, 500 acres of marsh reported by the Bureau of the Census as water.

<sup>3/</sup> Includes urban, suburban residential and industrial areas, rights-of-

way, cemeteries, schools, etc.

4/ Adjusted to include 4,500 acres of marsh reported as water by the Bureau of the Census and 97,500 acres classified as water by the Bureau of the Census but as land by the Forest Survey. Also adjusted to exclude 12,700 acres of Census water created since 1950.

 $Table\ 4.\ -- Commercial\ forest\ land,\ by\ ownership,\ major\ forest\ type,\ and\ stocking,\ Florida,\ 1959$ (In thousand acres)

							,		
Type and stocking	All ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:									
Well stocked Medium stocked Poorly stocked	2,771.0 2,062.4 5,834.0	361.1 156.1 224.1		0. 2 2. 0	71.8 46.3 113.5	113. 4 86. 4 206. 0	960.4 734.6 993.0	390. 4 368. 3 2, 136. 5	873.9 670.5 2,158.9
Total	10,667.4	741.3		2.2	231.6	405.8	2,688.0	2,895.2	3, 703. 3
Oak-pine type:									
Well stocked Medium stocked Poorly stocked	301.3 251.4 359.2	3.6 8.4 26.9	  	 	16.7 55.8	4. 2 8. 4 10. 5	111.1 65.0 47.8	107.8 83.5 86.0	74.6 69.4 132.2
Total	911.9	38.9			72.5	23. 1	223.9	277. 3	276, 2
Hardwood types:									
Well stocked Medium stocked Poorly stocked	1,994.2 1,605.3 4,407.0	70.3 52.6 124.0	4.7 14.2	  0.6	15. 2 15. 8 253. 3	32.6 27.0 91.9	508.1 412.9 676.9	561.7 455.9 1,184.5	806.3 636.4 2,061.6
Total	8,006.5	246.9	18.9	0.6	284. 3	151.5	1,597.9	2,202.1	3, 504. 3
All types:							.,		
Well stocked Medium stocked Poorly stocked	5,066.5 3,919.1 10,600.2	435.0 217.1 375.0	4.7 14.2	0. 2 2. 6	87.0 78.8 422.6	150. 2 121. 8 308. 4	1,579.6 1,212.5 1,717.7	1,059.9 907.7 3,407.0	1,754.8 1,376.3 4,352.7
Total	19,585.8	1, 027.1	18.9	2.8	588, 4	580. 4	4, 509. 8	5, 374. 6	7, 483. 8

Table 5. --Commercial forest land, by forest type and Survey Unit, Florida, 1959(In thousand acres)

Forest type	State	Northeast	Northwest	Central	South
Softwood types:					
Longleaf pine	4,202.4	1, 228. 4	1,262.2	1,663.4	48.4
Slash pine	5,287.5	2,029.3	1,264.9	894.8	1,098.5
Loblolly pine	369.3	139.2	220, 2	9.9	
Shortleaf pine	38.9	9.4	22.3	7.2	
Pond pine	347.3	203.2	104.8	39.3	
Sand pine	422.0	262.4	47.6	103.7	8. 3
Total	10,667.4	3, 871. 9	2,922.0	2, 718. 3	1, 155. 2
Hardwood types:					
Oak-pine Oak-hickory:	911.9	417.4	349.4	103.7	41.4
Upland hardwoods	699.2	278.7	293.3	127.2	
Scrub oak	1,954.4	637.0	833.8	480.2	3. 4
Oak-gum-cypress:					
Bench-hardwood	62.4	3.7	48.2	10.5	
Water oak-gum	3,034.8	1,246.7	814.7	<u>1</u> /796.9	$\frac{2}{176.5}$
Gum-cypress	1,882.2	691.4	458, 5	414.1	318.2
Total	8, 544. 9	3, 274. 9	2,797.9	1,932.6	539.5
Palm	373.5	20.4	2.1	174.2	176.8
All types	19, 585. 8	7, 167.2	5,722.0	4, 825. 1	1,871.5

<sup>1/</sup> Includes 1,500 acres of Australian pine type.
2/ Includes 3,000 acres of Australian pine type, and 9,600 acres of cajeput-tree type.

Table 6a. --Commercial forest land, by ownership, major forest type, and site quality, for the entire State of Florida, 1959
(In thousand acres)

Type and site quality $\frac{1}{2}$	A11 ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:									
Poor site	2,402.0	222, 1		1, 6	89.2	68. 5	202.9	1,075.5	742.2
Fair site	3, 619. 0	211.3			73.0	111.5	794.9	1,002.5	1, 425, 8
Good site	4,646.4	307.9		0.6	69.4	225. 8	1,690.2	817.2	1, 535. 3
Total	10,667.4	741.3		2.2	231.6	405.8	2,688.0	2,895.2	3, 703. 3
Oak-pine type:							And Advances		
Poor site	81.1	8,2			21,2	3, 1	8.1	20.1	20, 4
Fair site	303. 1	15.1			39.0	0. 1	65.0	77. 9	106.0
Good site	527.7	15.6			12.3	19.9	150.8	179.3	149.8
Total	911.9	38.9			72.5	23. 1	223.9	277.3	276. 2
Hardwood types:									
Poor site	1,890,7	92.2		0.6	136.4	47.6	228.1	408.8	977.0
Fair site	4,716.7	101.0	18.9		129.9	82.6	914.7	1, 486, 8	1, 982. 8
Good site	1,399.1	53.7			18.0	21.3	455.1	306.5	544.5
Total	8,006.5	246.9	18.9	0.6	284.3	151.5	1, 597. 9	2,202.1	3, 504. 3
All types:									
Poor site	4, 373, 8	322.5		2,2	246.8	119, 2	439.1	1,504.4	1,739.6
Fair site	8,638,8	327.4	18.9		241.9	194.2	1,774.6	2, 567, 2	3, 514, 6
Good site	6,573.2	377.2		0.6	99.7	267.0	2,296.1	1, 303. 0	2, 229. 6
Total	19, 585. 8	1, 027. 1	18.9	2.8	588.4	580.4	4, 509.8	5, 374.6	7, 483. 8

<sup>1/</sup> See description of site quality under Definition of Terms.

Table 6b. --Commercial forest land, by ownership, major forest type, and site quality, Northeast Florida, 1959 (In thousand acres)

			(111	thousand acres/					
Type and site quality 1/	All ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:									
Poor site	271.6	145.4					33, 1	27.8	65.3
Fair site	981.7	70.4			4.3	37.7	346.1	163.4	359.8
Good site	2,618.6	124. 2		0.4	1.9	91.2	1, 104. 3	341.9	954.7
Total	3, 871. 9	340.0		0.4	6.2	128.9	1, 483. 5	533.1	1, 379.8
Oak-pine type:									
Poor site									
Fair site	128.2	3. 7				0.1	50.9	29.9	43.6
Good site	289.2	4.7		~			93.1	101.8	89.6
Total	417.4	8.4				0. 1	144.0	131.7	133. 2
Hardwood types:									
Poor site	453.9	31.4			1.2	25.7	65.0	63.0	267.6
Fair site	1, 700, 7	4.7			3, 3	1, 3	542.2	449.7	699.5
Good site	723.3	33. 8				3.9	301.3	108.3	276.0
Total	2,877.9	69.9			4.5	30.9	908.5	621.0	1, 243. 1
All types:									
Poor site	725, 5	176.8			1.2	25.7	98.1	90.8	332.9
Fair site	2,810.6	78.8			7.6	39. 1	939.2	643.0	1, 102.9
Good site	3, 631. 1	162.7		0.4	1.9	95.1	1, 498. 7	552.0	1, 320. 3
Total	7, 167. 2	418.3		0.4	10.7	159.9	2,536.0	1,285.8	2,756.1

<sup>1/</sup> See description of site quality under Definition of Terms.

Table 6c. --Commercial forest land, by ownership, major forest type, and site quality, Northwest Florida, 1959 (In thousand acres)

Type and site quality $\frac{1}{}$	All ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:									
Poor site	381.6	76.7			40.2		169.8	13, 6	81. 3
Fair site	1,016.1	126.3			64.2	25.3	440.4	104. 3	255.
Good site	1,524.3	169.1		0.2	59.8	99.0	559.5	293. 9	342.8
Total	2,922.0	372.1		0.2	164.2	124.3	1, 169. 7	411.8	679.
Oak-pine type:									
Poor site	51.5	8, 2			21.2		8, 1	4.9	9. 1
Fair site	111.9	7.7			39.0		14. 1	29.8	21.
Good site	186.0	7,2			12.3	16.8	57.7	51.4	40. 6
Total	349. 4	23.1			72.5	16.8	79, 9	86.1	71. (
Hardwood types:									
Poor site	699.9	38, 8		0.3	134.6	8, 4	160.4	45.7	311, 7
Fair site	1,415.2	89.0			108. 1	33, 3	343.8	415.0	426. (
Good site	335, 5	19.9			18.0	12.1	124.0	59.0	102.
Total	2, 450. 6	147.7		0. 3	260. 7	53. 8	628. 2	519.7	840. 2
All types:									
Poor site	1, 133, 0	123.7		0.3	196.0	8.4	338. 3	64. 2	402. 1
Fair site	2,543.2	223.0			211.3	58, 6	798. 3	549.1	702.9
Good site	2,045.8	196.2		0. 2	90.1	127. 9	741. 2	404. 3	485.9
Total	5,722.0	542.9		0, 5	497, 4	194.9	1,877.8	1,017.6	1,590.9

<sup>1/</sup> See description of site quality under Definition of Terms.

Table 6d. --Commercial forest land, by ownership, major forest type, and site quality, Central Florida, 1959
(In thousand acres)

				(in thousand ac	res)				
Type and site quality 1/	All ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:									
Poor site	1,076.3			1.6	46.8	6. 1		749.4	272.4
Fair site	1, 235, 2	14.6			4.5	24.4	8.4	613.4	569.9
Good site	406.8	14.6			7. 7	35. 6	26.4	167.0	155.5
Total	2,718.3	29.2		1.6	59.0	66. 1	34.8	1,529.8	997.8
Oak-pine type:	•								
Poor site	11.0					3. 1		7.9	
Fair site	47.6	3. 7						18. 2	25.7
Good site	45.1	3. 7				3, 1		22.8	15.5
Total	103.7	7.4				6. 2		48.9	41, 2
Hardwood types:									
Poor site	558. 2	22.0		0, 3		9.9	2.7	232.4	290, 9
Fair site	1, 143. 9	7.3			18, 5	37.8	28.7	568.4	483.2
Good site	301.0					5.3	29.8	129. 1	136.8
Total	2,003.1	29. 3		0.3	18. 5	53. 0	61.2	929.9	910.9
All types:									
Poor site	1,645.5	22.0		1.9	46.8	19. 1	2.7	989. 7	563, 3
Fair site	2, 426. 7	25, 6			23. 0	62.2	37.1	1, 200, 0	1,078.8
Good site	752.9	18. 3			7. 7	44.0	56. 2	318.9	307.8
Total	4, 825. 1	65, 9		1.9	77. 5	125. 3	96. 0	2,508.6	1,949.9

 $<sup>\</sup>underline{1}\!\!/$  See description of site quality under Definition of Terms.

Table 6e. --Commercial forest land, by ownership, major forest type, and site quality, South Florida, 1959 (In thousand acres)

Type and site quality 1/	All ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:									
Poor site	672.5				2, 2	62.4		284.7	323, 2
Fair site	386.0					24. 1		121.4	240.5
Good site	96.7							14.4	82.3
Total	1, 155. 2				2. 2	86. 5		420.5	646.0
Oak-pine type:									
Poor site	18.6							7. 3	11. 3
Fair site	15.4								15. 4
Good site	7.4	~-	er es	~=				3.3	4.1
Total	41.4							10.6	30.8
Hardwood types:									
Poor site	178.7				0.6	3. 6		67.7	106.8
Fair site	456.9		18.9			10.2		53, 7	374. 1
Good site	39.3							10.1	29.2
Total	674.9		18. 9		0.6	13.8		131.5	510.1
All types:									
Poor site	869.8				2.8	66.0		359.7	441.3
Fair site	858, 3		18, 9			34. 3		175. 1	630.0
Good site	143.4							27.8	115.6
Total	1,871.5		18.9		2.8	100.3		562.6	1, 186. 9

<sup>1/</sup> See description of site quality under Definition of Terms.

Table 7. --Commercial forest land, by ownership and area-condition classes, <sup>1</sup>/<sub>2</sub> Florida, 1959
(In thousand acres)

				(III thousan	id acres)				
Area-condition class	All ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
							_		
1	1,796.9	93. 4			22.9	50.9	685.4	247.4	696.9
2	880.2	43.0			26.5	35.8	325.7	190. 4	258.8
. 3	6,318.6	515.7	4.7	0.2	116.4	185.4	1,791.1	1,529.7	2, 175. 4
4	100.0	6.8			8.8	0.3	7.1	32.0	45.0
5	10,490.1	368.2	14.2	2.6	413.8	308.0	1,700.5	3, 375. 1	4,307.7
Total	19, 585. 8	1,027.1	18.9	2. 8	588.4	580.4	4,509.8	5, 374. 6	7, 483. 8

<sup>1/</sup> See description of area-condition classes under Definition of Terms.

Table 8.--Commercial forest land, by area-condition and stand treatment needed for full productivity, Florida, 1959

(In thousand acres

		(In	thousand	acres)		
Area-	Type		No	Stand	Regene	ration
condition class	of land	All	treat- ment	improve- ment	Without site preparation	With site preparation
1	Flatwoods and uplands Lowlands	1,460.8 336.1	1,460.8 336.1			
	Total	1,796.9	1,796.9			
2	Flatwoods and uplands Lowlands	811.3 68.9	811.3 68.9			
	Total	880.2	880.2			
3	Flatwoods and uplands Lowlands	3,444.3 2,874.3		3,444.3 2,874.3		
	Total	6,318.6		6,318.6		
4	Flatwoods and uplands Lowlands	100.0	100.0			
	Total	100.0	100.0			
5	Flatwoods and uplands Lowlands	8,804.1 1,686.0			3,982.3 312.2	4,821.8 1,373.8
	Total	10,490.1			4,294.5	6,195.6
All classes	Flatwoods and uplands Lowlands	14,620.5 4,965.3	2,372.1 405.0	3,444.3 2,874.3	3,982.3 312.2	4,821.8 1,373.8
	Total	19,585.8	2,777.1	6,318.6	4,294.5	6,195.6

Table 9. --Commercial forest land cut over annually, by ownership and Survey Unit, Florida, 1958

	(In	thousand ac	res)		
Ownership	State	Northeast	Northwest	Central	South
Public	56.7	28.7	27.4	0.6	
Private:					
Pulp company Other wood-using	149.5	90.0	59.5		
industries	26.5	16.5	8.7	1.3	
Farm	231.8	76.6	42.5	85.0	27.7
Miscellaneous private	239.5	106.5	53.6	58.0	21.4
Total	647.3	289.6	164.3	144.3	49.1
Total cut over	704.0	318.3	191.7	144.9	49.1

Table 10a. --Net volume of sawtimber on commercial forest land, by ownership, major forest type, and species group, for the entire State of Florida, 1959

(In million board feet 1/)

Type and species group	All ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:									
Softwood Hardwood	8, 345. 8 141. 7	1,053.1 3.8		en en	177.0	511.9	2,591.6 22.7	1, 560. 4 62. 2	2,451.8 53.0
Total	8, 487. 5	1,056.9			177.0	511.9	2,614.3	1,622.6	2,504.8
Oak-pine type:									
Softwood Hardwood	1,289.4 228.6	47.3,			51. 9 1. 8	17.7	498.0 109.9	385. 2 64. 1	289. 3 52. 8
Total	1,518.0	47.3			53. 7	17.7	607.9	449.3	342.1
Hardwood types:									
Softwood Hardwood	5, 109.3 7, 269.6	350.7 203.3			89.5 82.6	91.0 75.2	1,532.7 2,430.6	1, 192. 3 1, 730. 3	1, 853.1 2, 747.6
Total	12, 378.9	554.0			172. 1	166.2	3, 963. 3	2,922.6	4,600.7
All types:							-		
Softwood Hardwood	14,744.5 7,639.9	1,451.1 207.1			318. 4 84. 4	620.6 75.2	4,622.3 2,563.2	3, 137.9 1, 856.6	4,594.2 2,853.4
Total	22, 384. 4	1,658.2			402.8	695.8	7, 185. 5	4,994.5	7, 447.6

<sup>1/</sup> International  $\frac{1}{4}$ -inch rule.

Table 10b. --Net volume of sawtimber on commercial forest land, by ownership, major forest type, and species group, Northeast Florida, 1959 (In million board feet 1/)

Type and species group	A11 ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:									
Softwood Hardwood	4,025.4 52.9	440.6				173.9	1,625.7 12.0	612.7 8.5	1, 172. 5 32. 4
Tota1	4,078.3	440.6	-			173, 9	1,637,7	621.2	1, 204. 9
Oak-pine type:									
Softwood Hardwood	719.4 149.4	23.8					340.6 74.7	182.9 28.4	172.1 46.3
Total	868.8	23, 8	- ~				415.3	211.3	218.4
Hardwood types:									
Softwood Hardwood	2,025.0 3,174.0	122, 2 81, 6				5. 9 14. 4	917.8 1,124.6	364.6 708.3	614.5 1,245.1
Total	5, 199. 0	203. 8				20. 3	2,042.4	1,072.9	1,859.6
All types:			-						
Softwood Hardwood	6,769.8 3,376.3	586.6 81.6				179.8 14.4	2,884.1 1,211.3	1, 160. 2 745. 2	1, 959. 1 1, 323. 8
Total	10, 146. 1	668, 2				194. 2	4,095.4	1,905.4	3, 282. 9

<sup>1/</sup> International  $\frac{1}{4}$ -inch rule.

Table 10c. --Net volume of sawtimber on commercial forest land, by ownership, major forest type, and species group, Northwest Florida, 1959 (In million board feet  $\underline{1}^{j}$ )

Type and species group	A11 ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:									
Softwood Hardwood	3, 117. 7 85. 6	594.0 3.8			162.9	230.3	922. 9 9. 5	535.7 51.7	671.9 20.6
Total	3, 203. 3	597.8			162.9	230.3	932.4	587.4	692.5
Oak-pine type:									
Softwood Hardwood	452.8 75.8	17.7			51. 9 1. 8	12.2	157. 4 35. 2	133.7 34.2	79.9 4.6
Total	528.6	17.7			53. 7	12.2	192.6	167.9	84. 5
Hardwood types:					<del></del>				
Softwood Hardwood	1,140.6 2,985.1	218.5 119.7			88. 4 79. 5	42.1 30.7	421.4 1,280.6	140. 3 548. 8	229.9 925.8
Total	4,125.7	338.2			167.9	72.8	1,702.0	689. 1	1, 155. 7
All types:									
Softwood Hardwood	4,711,1 3,146.5	830.2 123.5		 	303. 2 81. 3	284. 6 30. 7	1,501.7 1,325.3	809.7 634.7	981.7 951.0
Total	7, 857. 6	953.7		an en	384. 5	315. 3	2,827.0	1, 444. 4	1, 932. 7

<sup>1/</sup> International  $\frac{1}{4}$ -inch rule.

Table 10d. --Net volume of sawtimber on commercial forest land, by ownership, major forest type, and species group, Central Florida, 1959 (In million board feet  $\underline{1}$ )

Type and species group	All ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest industry	Farm	Misc.
Pine types:						-			,
Softwood Hardwood	862, 5 3, 2	18.5			7. 1	92.8	43.0 1.2	313. 1 2. 0	388. 0
Total	865.7	18. 5			7.1	92.8	44. 2	315.1	388.0
Oak-pine type:									
Softwood Hardwood	82. 4 3. 4	5. 8 				5. 5		43.7 1.5	27.4 1.9
Total	85, 8	5. 8				5. 5		45. 2	29.3
Hardwood types:									
Softwood Hardwood	1,288.7 1,075.4	10. 0 2. 0			1. 1 3. 1	43.0 30.1	193, 5 25, 4	588.5 467.9	452.6 546.9
Total	2, 364. 1	12.0			4.2	73. 1	218.9	1,056.4	999.5
All types:									177
Softwood Hardwood	2,233.6 1,082.0	34.3 2.0			8. 2 3. 1	141.3 30.1	236.5 26.6	945.3 471.4	868. 0 548. 8
Total	3, 315, 6	36. 3			11, 3	171.4	263, 1	1,416.7	1, 416. 8

<sup>1/</sup> International 1/4-inch rule.

Table 10e. --Net volume of sawtimber on commercial forest land, by ownership, major forest type, and species group, South Florida, 1959 (In million board feet  $\frac{1}{2}$ )

Type and species group	All ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:									
Softwood Hardwood	340. 2			 	7.0	14.9		98.9	219.4
Total	340.2				7. 0	14.9		98.9	219.4
Oak-pine type:									
Softwood Hardwood	34.8							24.9	9.9
Total	34. 8							24.9	9. 9
Hardwood types:									
Softwood Hardwood	655.0 35.1			 				98.9 5.3	556.1 29.8
Total	690.1							104, 2	585.9
All types:									
Softwood Hardwood	1,030.0 35.1	 			7.0	14.9		222.7 5.3	785. 4 29. 8
Total	1,065.1				7.0	14.9		228, 0	815. 2

<sup>1/</sup> International  $\frac{1}{4}$ -inch rule.

Table 11a. --Net volume of growing stock and cull timber on commercial forest land, by ownership, major forest type, and species group, for the entire State of Florida, 1959

	sand 'ds	233 277	510	911	1,278	5, 297	777	441	565	1, 135	-
Misc. private	n Thousand	14,	14,	0 8	8	1		3 20, 441 8 14, 124	1 34,565		
	Million cu. ft.	1,037.7	1, 057.8	68. (	93.	423.6	1, 421. 5	1, 529. 3	2, 573. 1	89.3	
Farm	Thousand	7, 177	7,449	1,263	1,763	4, 407	13,658	12, 847 10, 023	22,870	457	
ъ́	Million cu. ft,	520.0 20.4	540.4	95. 1 34. 9	130.0	352, 4	1, 033.8	967. 5	1, 704. 2	37.0	
est stry	Thousand	12, 541	12, 744	1,876	2, 278	5, 619	15, 947	20, 036 10, 933	30, 969	6, 327	
Forest	Million cu. ft.	886.8	901.2	143. 1 29. 7	172.8	457.6	1, 234. 1	1,487.5	2, 308. 1	48.6	- Control of
unty, and	Thousand	1, 796	1, 801	83	99	347	724	2, 226	2, 624	48	
State, county, municipal	Million 7	130.7	131.0	6.1	7.1	27.6	55.7	164. 4	193.8	4.0	-
er ra1	Thousand	981 14	995	191	220	305	668	1,477	1,883	71	
Other Federal	Million T	69.0	8.69	14.0	15.9	24.9 26.9	51.8	107.9	137.5	5.9	
f Land ment	Thousand	0 !	2	1 1	-	: :	:	2 -	2		
Bureau of Land Management	Million Tl	0.1	0, 1	: :		: :	1	0.1	0.1	1 1	
an	Thousand			: :	-	33	33	33	33	39	
Indian	Million T	+ +	-	1 1	+	2.3	2, 3	2.3	2.3	3.1	
nal st	Thousand	5, 325	5, 352	174 45	219	1, 152	2, 187	6, 651 1, 107	7,758	367	
National forest	Million T	375. 3 1. 9	377.2	12.8	15.5	96.0	171.4	484. 1 80. 0	564.1	28.9	
hips	Thousand	42,055	42,853	4,498	5, 857	17, 160 34, 834	51, 994	63, 713 36, 991	100, 704	2, 741 /32, 924	
A11 ownerships	Million Ti	3, 019. 6 57. 9	3, 077. 5	339. 1 96. 0	435, 1	1, 384. 4	3,970.6	4, 743. 1 2, 740. 1	7,483.2 1	216.8 2,741 1/2,422.2 2/32,924	
Type and species group		Growing stock: Pine types: Softwood Hardwood	Total 3	Oak-pine type: Softwood Hardwood	Total	Hardwood types: Softwood Hardwood	Total 3	All types: Softwood 4 Hardwood 2	Total 7	Cull timber: Softwood Hardwood 1/2	

Includes 1,210.3 million cubic feet of palm. Includes 16,180 thousand cords of palm. 7 21

Table 11b. --Net volume of growing stock and cull timber on commercial forest land, by ownership, major forest type, and species group, Northeast Florida, 1959

Type and species group	A	All ownerships	Nati for	National forest	Inc	Indian	Bureau Manag	Bureau of Land Management	Ped	Other Federal	State, county, and municipal	county, and municipal	Forest	est	[# <sub>1</sub>	Farm	Misc. private	c. ate
	Million cu. ft.	Thousand	Million cu. ft.	Million Thousand cu. ft. cords	Million cu. ft.	Thousand	Million Cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand
Growing stock: Pine types: Softwood Hardwood	1,303.0	18, 338	169.6	2, 420	1.1	1.1	1.1	1.1	1 1	1.1	38.7	528	543.7	7,687	171.4	2, 390	379.6 12.8	5, 313
Total	1, 327.6	18,673	169.6	2,420	!			1	1	1	38. 7	528	552.7	7,815	174.2	2,427	392, 4	5, 483
Oak-pine type: Softwood Hardwood	208.3	2, 771	6.2	83		1 1	1 1		1 1		1 1	1 1	104.4	1,375	51.4	685 159	46.3	628
Total	257.5	3, 452	6.2	83	-	:	!	:	:	1	1	:	122.0	1,611	62.6	844	66.7	914
Hardwood types: Softwood Hardwood	626.9 1,099.0	7,766	28.6 29.5	335 395	1 1	; ;	1 1	1 1	::	::	3.4	22	285. 4 390. 2	3, 526 5, 246	115.9	1, 448 3, 326	195. 0 426. 7	2, 435 5, 756
Total	1,725.9	22, 533	58.1	730	1	:	:	:	:	1	5.4	99	675, 6	8,772	365.1	4, 774	621.7	8, 191
All types: Softwood Hardwood	2, 138. 2 1, 172. 8	28, 875 15, 783	204.4	2,838	: :	1 1	1 1	1 1	1 1	1:	40.7	550	933.5	12,588	338.7 263.2	4, 523 3, 522	620.9	8, 376 6, 212
Total	3, 311.0	44,658	233, 9	3, 233	1	1	1	:	1	1	44.1	594	1, 350. 3	18, 198	601.9	8, 045	1, 080. 8	14, 588
Cull timber: Softwood Hardwood	69.5	888 2/12, 905	5.3 18.8	70	: :	1 1	1 1	1 1	0.4	. ro	1.0	13	28.2	367	14.7	177	20.3	261
Total	1,019.9	13, 793	24, 1	331	1	-	:	:	0.4	ro.	2.7	40	353. 2	4,771	177.4	2, 418	462.1	6, 228

 $\underline{1/}$  Includes 415.8 million cubic feet of palm.  $\underline{2/}$  Includes 5, 533 thousand cords of palm.

Table 11c. -- Net volume of growing stock and cull timber on commercial forest land, by ownership, major forest type, and species group, Northwest Florida, 1959

4	ante ite.		inc or gro	wing stock	and care	1001001		10000	ma fa 'nur	'drug rou	200 -05-11	in (all the	2000	I dule 11., Net volume of growing stock and can time of the contract and, by office and, indicators, indicators	or min car F	ioiida, ic		
Type and species group	owne	A11 ownerships	Nath	National forest	hul	Indian	Bureau Manag	Bureau of Land Management	Other Federal	Other	State, county, municipal	State, county, and municipal	Forest	est	F, a.	Farm	Misc. private	te te
	Million cu. ft.	Million Thousand cu. ft. cords	Million cu. ft.	Million Thousand cu. ft. cords	Million cu. ft.	Million Thousand cu. ft. cords	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million 7	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million 7	Thousand
Growing stock: Pine types: Softwood Hardwood	1,072.0	15, 077	196.8	2,773		1 1			59.9 0.8	846	65.7	908	334.3 4.8	4,742	163.0 12.8	2, 249	252.3	3, 559
Total	1,099.9	15, 466	198.7	2,800	:	:	;	1	60.7	860	0 '99	913	339, 1	4,809	175.8	2, 418	259.6	3, 666
Oak-pine type: Softwood Hardwood	108.5	1, 435	5.7	80	1 1	: :	: :	: :	14.0	191	4.5	63	38.7	501 166	29. 2 22. 5	381	16.4	219
Total	153.2	2,082	8, 4	125	;	:	:	1	15.9	220	5.5	19	50.8	299	51.7	704	20.9	287
Hardwood types: Softwood Hardwood	327.2	4, 048 14, 165	65.3	790	1 1	1 1	: :	1 1	24.5 25.9	300	11.0	140	120.3 373.7	1,476	43.8	573 3, 609	62. 3 331. 7	769
Total	1, 377.7	18, 213	109.0	1, 395	:	:	-	1	50.4	650	27.4	366	494.0	6,383	302.9	4, 182	394.0	5, 237
All types: Softwood Hardwood	1, 507. 7	20, 560	267.8	3, 643	: :	: :,	1 1	1 1	98.4	1, 337	81.2	1, 111	493.3 390.6	6, 719 5, 140	236.0	3, 203 4, 101	331.0 343.5	4, 547
Total	2,630.8	35, 761	316.1	4, 320	:	1	;	:	127.0	1, 730	98.9	1,358	883.9	11,859	530.4	7, 304	674.5	9, 190
Cull timber: Softwood Hardwood	67.5 1/431.2	855 2/5,926	23.2	291 379	1 1	1 1	1 1	: 1	5.7	69	2.6	30	14.8 135.0	190	4.4	59	16.8 132.5	216 1,836
Total	498.7	6, 781	50.3	049	;	1	!	;	56.7	782	10, 4	140	149.8	2,001	82,2	1, 136	149.3	2,052

1/ Includes 31.5 million cubic feet of palm. 2/ Includes 419 thousand cords of palm.

Table 11d. --Net volume of growing stock and cull timber on commercial forest land, by ownership, major forest type, and species group, Central Florida, 1959

	Thousand	1,818	1, 818	64	7.7	2, 093	5, 131	3, 975 3, 051	7,026	172	4, 694
Misc. private	Million T	129.3	129.3	5.3	6.2	166. 3 223. 8	390, 1	300.9	525.6	14. 1 334. 5	348.6
u.	Thousand	1, 550	1, 580	197	215	2, 386 2, 316	4, 702	4, 133	6, 497	188	6, 105
Farm	Million 7	110.2	112.3	14.5	15.7	192.7	365.8	317.4	493.8	15.0	454.8
est	Thousand	112	120	1 :	:	617	792	729	912	67	179
Forest	Million cu. ft.	8.8 0.6	9.4	1 :	:	51.9	64.5	60.7	73.9	. 9. 6. 8. 3. 6.	13.9
State, county, and municipal	Thousand	314	314	20	20	185	292	519	626	5 139	144
State, co muni	Million cu. ft.	22.6	22.6	1.6	1.6	14.6 8.3	22.9	38.8	47.1	0.4	10.4
Other Federal	Thousand	110	110	1 1	1	5 13	18	115	128	2 16	18
Ped	Million cu. ft.	7.3	7.3	11	:	0.4	1.4	7.7	8.7	0.2	1.5
Bureau of Land Management	Thousand	87 ¦	2	1 1		1 1	;	2 ;	2	1:	:
Bureau Manag	Million cu. ft.	0.1	0.1	1 1		1 :	:	0.1	0.1	: :	:
Indian	Thousand	11			:	: :	:	11	:		1
Ind	Million cu. ft.	11	:	: :	:	1 1	;	::	:	1 1	1
National forest	Million Thousand cu. ft. cords	132	132	11 :	11	27	62	170 35	205	97	103
Nati	Million cu. ft.	8.9	8.9	0.9	6.0	2.2	4.3	11.9	14.1	6.8	7.2
11 ships	Thousand	4,038	4,076	292	323	5, 313 5, 684	10,997	9, 643 5, 753	15, 396	440 2/10, 803	11, 243
A11 ownerships	Million Thousand	287.2	289.9	22.3	24.4	428. 0 421. 0	849.0	737.5	1, 163.3	35.7 1/800.7	836.4
Type and species group		Growing stock: Pine types: Softwood Hardwood	Total	Oak-pine type: Softwood Hardwood	Total	Hardwood types: Softwood Hardwood	Total	All types: Softwood Hardwood	Total	Cull timber: Softwood Hardwood	Total

 $\overline{1}$ / Includes 551.4 million cubic feet of palm.  $\overline{2}$ / Includes 7,367 thousand cords of palm.

Table 11c. -- Net volume of growing stock and cull timber on commercial forest land, by ownership, major forest type, and species group, South Florida, 1959

Farm Misc.	cu. ft. cords cu. ft. cords	75. 4 988 276.5 3,543 2.7 36	78.1 1,024 276.5 3,543	:		1 1 1		15, 7 218	15,7 218	988 276.5 3,	2.7 36 15,7 218	78.1 1,024 292,2 3,761	2,9 33 38,1 486	54.0 724 182.2 2,518	56, 9 757 220, 3 3, 604
Forest	Million Thousand cu. ft. cords	1 1	:	. !	8 8	1	1 1		1	-	:	1	;	1 3	2 2
State, county, and municipal	Million Thousand cu. ft. cords	3,7 46	3.7 46	1 1	1	1				3.7 46		3.7 46	;	1.6 20	1.6 20
Other	Million Thousand cu. ft. cords	1.8 25	1.8 25	1	1	1 1	:		1 2 8 8	1, 8 25	E E	1, 8 25	:	0, 6	0.3
Bureau of Land Management	Million Thousand eu, ft. cords	::	1	:		1	:		1	:	-		;	1 1	:
Indian	Million Thousand cu, R. cords	::	8 8	:	:	1	2, 3 33	2 0	2, 3 33	2, 3 33	8 8	2, 3 33	3, 1 39	1,5 19	4,6 58
National	Million Thousand eu. ft. cords		8 8	1		1	8 8		8 8				t 1	1	
Au forest forest forest	Million Thousand cu, ft. cords	357.4 4,602 2.7 36	360, 1 4, 638		1 1	1	2,3 33	15.7 218	18,0 251	359.7 4,635	18, 4 254	378, 1 4, 889	44. 1 558	2/3,	284.0 3,848
Type and species		Growing stock: Pine types: Softwood Hardwood	Total	Oak-pine type: Softwood	Hardwood	Total	Hardwood types: Softwood	Hardwood	Total	All types: Softwood	Hardwood	Total	Cull timber:	73	Total

1/ Includes 211.6 million cubic feet of pairn. 2/ Includes 2,861 thousand cords of paim.

Table 12, .--Net volume of sawtimber and growing stock on commercial forest land, by species group, stand size, and Survey Unit, Florida, 1959

		State			Northeast			Northwest			Central			South	
Stand Bize	'Fotal	Softwood	llardwood	Total	Softwood	Hardwood	Total	Softwood	Hardwood	Total	Softwood	Hardwood	Total	Softwood	Hardwood
					S	SAWTIMBER (In million board feet)	(In million	board feet)				1			
Sawtimber stands Potetimber stands Seeding and sapling stands Nonstocked and other areas	19,105.9 1,906.7 742.9 628.9	12,260.1 1,391.6 610.2 482.6	6,845.8 515.1 132.7 146.3	8,738,4 838,9 338,7 230,1	5,714.1 622.2 265.9 167.6	3,024.3 216.7 72.8 62.5	6,852.1 631.0 215.6 158.9	3,943.9 459.1 183.7 124.4	2,908.2 171.9 31.9 34.5	2,661.0 328.8 151.5 174.3	1,771.9 209.7 123.5 128.5	889.1 119.1 28.0 45.8	854.4 108.0 37.1 65.6	830.2 100.6 37.1 62.1	24.2 7.4 3.5
Total	22,384.4	14,744.5	7,639.9	10,146.1	6,769.8	3,376.3	7,857,6	4,711.1	3,146.5	3,315,6	2,233,6	1,082.0	1,065.1	1,030.0	35,1
					al D	GROWING STOCK (In million cubic feet)	K (In millic	on cubic fee	,		1				
Sawtimber stands Poletimber stands Seedling and sapling stands Nonstocked and other areas	5,418.8 1,689.2 209.6 165.6	3,256.5 1,209.0 160.3 117.3	2,162.3 480.2 49.3 48.3	2,462.5 701.7 88.5 58.3	1,530.1 502.4 64.8 40.9	932.4 199.3 23.7 17.4	1,924.2 592.0 71.4 43.2	1,013.3 408.3 53.8 32.3	910.9 183.7 17.6 10.9	790.7 285.4 39.6 47.6	481.1 194.7 31.6 30.1	309.6 90.7 8.0 17.5	241.4 110.1 10.1 16.5	232.0 103.6 10.1 14.0	9.4 6.5 
Total	7,483,2	4,743.1	2,740.1	3,311,0	2,138.2	1,172.8	2,630.8	1,507.7	1,123.1	1,163,3	737.5	425.8	378.1	359,7	18.4
					0	GROWING STOCK (In thousand cords)	CK (In tho	isand cords							
Sawtimber stands Poletimber stands Seedling and saoting stands	70,939 24,804 2,797	42,222 17,804 2,142	28,717 7,000 655	32,363 10,361	20,033 7,433 863	12,330 2,928 307	25,461 8,769 973	13,336 6,076 731	12, 125 2,693 242	10,151 4,103 520	6,017 2,816 414	4,134 1,287 106	2,064 1,571	2,836 1,479 134	128 92 
Nonstocked and other areas	2,164	1,545	619	764	546	218	558	417	141	622	396	226	220	186	34
Total	100,704	63,713	36,991	44,658	28,875	15,783	35,761	20,560	15,201	15,396	9,643	5,753	4,889	4,635	254

Table 13a.--Net volume of sawtimber and growing stock on commercial forest land, by species, for the entire State of Florida, 1959

Species	Sawtimber	Growin	ng stock
	Million bd. ft. 1/	Million cu. ft. 2/	Thousand cords 3/
Yellow pine:			
Longleaf pine	3,960.4	1,260.9	17,686
Slash pine	4,432.2	1,417.2	19,892
Loblolly pine	1,388.2	354.1	4,696
Pond pine	268.0	92.2	1,279
Other yellow pine	224.9	118.6	1,728
Total	10,273.7	3,243.0	45,281
Other softwoods:			
Cypress	4,394.8	1,465.0	17,987
Cedar	76.0	35.1	445
Total	4,470.8	1,500.1	18,432
Total softwoods	14,744.5	4,743.1	63,713
Preferred hardwoods:			
Sweetgum	667.1	260.6	3,525
Yellow-poplar	63.8	27.0	375
White and swamp chestnut oaks	94.7	22.9	298
Cherrybark and shumard oaks	32.1	6.7	85
Ash	418.6	166.1	2,297
Hard maple	7.6	4.1	57
Total	1,283.9	487.4	6,637
Other hardwoods:			
Tupelo and blackgum	2,059.0	722.7	9,707
Soft maple	389.1	169.0	2,344
Other white oaks	768.2	238.1	3,070
Other red oaks	1,653.6	552.2	7,424
Hickory	407.9	129.1	1,710
Beech	25.1	5.5	69
Holly, dogwood, persimmon		1.8	25
Other hardwoods	1,053.1	434.3	6,005
Total	6,356.0	2,252.7	30,354
Total hardwoods	7,639.9	2,740.1	36,991
All species	22,384.4	7,483.2	100,704

1/ International  $\frac{1}{4}$ -inch rule. 2/ Excludes bark. 3/ Includes bark.

Table 13c.--Net volume of sawtimber and growing stock on commercial forest land, by species, Northwest Florida, 1959

Species	Sawtimber	Grow	ing stock
	Million bd. ft. 1/	Million cu. ft. 2/	Thousand
Yellow pine:			
Longleaf pine	1,746.3	608.1	8,603
Slash pine	1,286.2	408.0	5,693
Loblolly pine	729.4	188.6	2,500
Pond pine	58.8	25.7	359
Other yellow pine	142.4	44.1	603
Total	3,963.1	1,274.5	17,758
Other softwoods:			
Cypress	685.8	204.2	2,433
Cedar	62.2	29.0	369
Total	748.0	233.2	2,802
Total softwoods	4,711.1	1,507.7	20,560
Preferred hardwoods:			
Sweetgum	263.7	96.9	1,300
Yellow-poplar	54.5	23.6	329
White and swamp chestnut oaks	48.2	13.8	183
Cherrybark and shumard oaks			
Ash	148.5	39.9	534
Hard maple		0.5	8
Total	514.9	174.7	2,354
Other hardwoods:			
Tupelo and blackgum	1,016.6	356.4	4,764
Soft maple	52.8	20.7	291
Other white oaks	216.7	69.3	922
Other red oaks	560.3	199.6	2,727
Hickory	252.9	76.5	1,006
Beech	25.1	5.5	69
Holly, dogwood, persimmon		1.0	14
Other hardwoods	507.2	219.4	3,054
Total	2,631.6	948.4	12,847
Total hardwoods	3,146.5	1,123.1	15,201
All species	7,857,6	2,630.8	35,761

1/ International  $\frac{1}{4}$ -inch rule. 2/ Excludes bark. 3/ Sound wood and bark.

Table 13b. -- Net volume of sawtimber and growing stock on commercial forest land, by species, Northeast Florida, 1959

Species	Sawtimber	Growin	g stock
	Million bd. ft.1/	Million cu. ft. 2/	Thousand cords 3/
Yellow pine:			
Longleaf pine	1,779.1	513.1	7,134
Slash pine	2,247.4	742.5	10,482
Loblolly pine	625.7	157.9	2,101
Pond pine	176.5	56.8	787
Other yellow pine	71.1	59.1	898
Total	4,899.8	1,529.4	21,402
Other softwoods:			
Cypress	1,859.4	605.2	7,430
Cedar	10.6	3.6	43
Total	1,870.0	608.8	7,473
Total softwoods	6,769.8	2,138.2	28,875
Preferred hardwoods:			
Sweetgum	296.4	123.0	1,670
Yellow-poplar	5.9	2.7	37
White and swamp chestnut oaks	46.5	9.1	115
Cherrybark and shumard oaks	32.1	6.5	82
Ash	146.3	69.9	985
Hard maple	5.1	1.3	17
Total	532.3	212.5	2,906
Other hardwoods:			
Tupelo and blackgum	895.6	305.0	4,110
Soft maple	216.1	92.2	1,268
Other white oaks	410.7	122.2	1,552
Other red oaks	832.6	266.4	3,567
Hickory	114.9	41.1	553
Beech			
Holly, dogwood, persimmon		0.8	11
Other hardwoods	374.1	132.6	1,816
Total	2,844.0	960.3	12,877
Total hardwoods	3,376.3	1,172.8	15,783
_			

1/ International  $\frac{1}{4}$ -inch rule. 2/ Excludes bark. 3/ Includes bark.

Table 13d. -- Net volume of sawtimber and growing stock on commercial forest land, by species, Central Florida, 1959

Species	Sawtimber	Grow	ing stock
	Million bd. ft. 1/	Million cu. ft.2/	Thousand cords 3/
Yellow pine:			
Longleaf pine	433.1	139.3	1,944
Slash pine	513.7	152.3	2,128
Loblolly pine	33.1	7.6	95
Pond pine	32.7	9.7	133
Other yellow pine	11.4	15.4	227
Total	1,024.0	324.3	4,527
Other softwoods:			
Cypress	1,206.4	410.7	5,083
Cedar	3.2	2.5	33
Total	1,209.6	413.2	5,116
Total softwoods	2,233.6	737.5	9,643
= Preferred hardwoods:			
Sweetgum	107.0	40.7	555
Yellow-poplar	3.4	0.7	9
White and swamp chestnut oaks			
Cherrybark and shumard oaks		0.2	3
Ash	123.8	56.3	778
Hard maple	2.5	2.3	32
Total	236.7	100.2	1,377
Other hardwoods:			
Tupelo and blackgum	146.8	61.2	831
Soft maple	114.1	50.1	693
Other white oaks	137.0	44.9	574
Other red oaks	235.5	75.8	995
Hickory	40.1	11.5	151
Beech			
Holly, dogwood, persimmon			1 120
Other hardwoods	171.8	82.1	1,132
Total	845.3	325.6	4,376
Total hardwoods	1,082.0	425.8	5,753
All species	3,315.6	1,163.3	15,396

1/ International  $\frac{1}{4}$ -inch rule. 2/ Excludes bark. 3/ Includes bark.

Table 13e.--Net volume of sawtimber and growing stock on commercial forest land, by species, South Florida, 1959

Species	Sawtimber	Grow	ing stock
	Million bd. ft.1/	Million cu. ft. 2/	Thousand cords 3/
Yellow pine:			
Longleaf pine	1.9	0.4	5
Slash pine	384.9	114.4	1,589
Loblolly pine		~-	
Pond pine			
Other yellow pine			
Total	386.8	114.8	1,594
Other softwoods:			
Cypress	643.2	244.9	3,041
Cedar			
Total	643.2	244.9	3,041
Total softwoods	1,030.0	359.7	4,635
= Preferred hardwoods:			
Sweetgum			
Yellow-poplar			
White and swamp chestnut oaks			
Cherrybark and shumard oaks			
Ash Hard maple			
<del>-</del>			
Total _			
Other hardwoods:			
Tupelo and blackgum		0.1	2
Soft maple	6.1	6.0	92
Other white oaks	3.8	1.7	22
Other red oaks Hickory	25.2	10.4	135
Beech			
Holly, dogwood, persimmon			
Other hardwoods		0.2	3
Total	35.1	18.4	254
Total hardwoods	35.1	18.4	254
= All species	1,065.1	378.1	4,889

<sup>1</sup> International  $\frac{1}{4}$ -inch rule. 2 Excludes bark. 3 Includes bark.

Table 14a.--Net volume of timber on commercial forest land, by species group and class of material, for the entire State of Florida, 1959

Class of material	То	tal	Softv	vood	Hard	wood
	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords
Sawtimber trees:						
Saw-log portion Upper stem	3,807.7 1,280.8	47,518 16,867	2,588.8 725.2	32,333 9,659	1,218.9 555.6	15,185 7,208
Total	5,088.5	64,385	3,314.0	41,992	1,774.5	22,393
Poletimber trees	2,394.7	36,319	1,429.1	21,721	965.6	14,598
Total grow- ing stock	7,483.2	100,704	4,743.1	63,713	2,740.1	36,991
Cull trees:						
Sound culls: 1/ Sawtimber- size trees Poletimber-	1,470.3	18,636	161.2	1,970	1,309,1	16,666
size trees	1,123.5	16,456	40.0	595	1,083.5	15,861
Total	2,593.8	35,092	201.2	2,565	2,392.6	32,527
Rotten culls	45.2	573	15.6	176	29.6	397
Total cull trees	2,639.0	35,665	216.8	2,741	2,422.2	32,924
Hardwood limbs	390.2	4,819			390.2	4,819
Salvable dead trees	1. 3	17	1.3	17		
All timber	10,513.7	141,205	4,961.2	66,471	5,552.5	74,734

<sup>1/</sup> Includes volume of palm.

Table 14b.--Net volume of timber on commercial forest land, by species group and class of material, Northeast Florida, 1959

Class of material	Т	otal	Soft	wood	Hard	lwood
	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords
Sawtimber trees:						
Saw-log portion Upper stem	1,716.9 552.9	21,538 7,265	1,185.9 318.1	14,918 4,265	531.0 234.8	6,620 3,000
Total	2,269.8	28,803	1,504.0	19,183	765.8	9,620
Poletimber trees	1,041.2	15,855	634.2	9,692	407.0	6,163
Total grow- ing stock	3,311.0	44,658	2,138.2	28,875	1,172.8	15,783
Cull trees:  Sound culls: 1/  Sawtimber-  size trees  Poletimber-	588.3	7,491	56.8	707	531.5	6,784
size trees	413.9	6,068	10.0	152	403.9	5,916
Total	1,002.2	13,559	66.8	859	935.4	12,700
Rotten culls	17.7	234	2.7	29	15.0	205
Total cull trees	1,019.9	13,793	69.5	888	950.4	12,905
Hardwood limbs	165.8	2,050			165.8	2,050
Salvable dead trees	0.8	11	0.8	11		
All timber	4,497.5	60,512	2,208.5	29,774	2,289.0	30,738

<sup>1/</sup> Includes volume of palm.

Table 14c. -- Net volume of timber on commercial forest land, by species group and class of material, Northwest Florida, 1959

Class of material Total Softwood Hardwood Million Thousand Million Thousand Million Thousand cu. ft. cords cu. ft. cords cu. ft. cords Sawtimber trees: Saw-log portion 1,309.4 16,466 809.3 10,251 500.1 6,215 Upper stem 460.4 6,166 232.9 3,144 227.5 3,022 1,769.8 22,632 1,042.2 13,395 727.6 9,237 861.0 13,129 465.5 7,165 Poletimber trees 395.5 5,964 Total growing stock 2,630.8 35,761 1,507.7 20,560 1,123.1 15,201 Cull trees: Sound culls: 1/ Sawtimber-3,742 297.0 43.1 527 253.9 3,215 size trees Poletimber-181.1 2,782 14.1 213 167.0 2,569 size trees 478.1 6,524 57.2 420.9 5,784 Total 740 Rotten culls 20.6 10.3 257 115 10.3 142 Total cull 498.7 6,781 67.5 431.2 5,926 trees Hardwood limbs 143.3 1,769 --143.3 1,769 Salvable dead trees 2 0.1 2

1.575.3

21,417

1,697.6

22,896

3,272.9

44,313

All timber

Table 14d. -- Net volume of timber on commercial forest land, by species group and class of material, Central Florida, 1959

Class of material	To	tal	Soft	wood	Hard	wood
	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand
Sawtimber trees:						
Saw-log portion Upper stem	582.7 206.2	7,131 2,678	401.7 116.8	4,865 1,539	181.0 89.4	2,266 1,139
Total	788.9	9,809	518.5	6,404	270.4	3,405
Poletimber trees	374.4	5,587	219.0	3,239	155.4	2,348
Total grow- ing stock	1,163.3	15,396	737.5	9,643	425.8	5,753
Cull trees:  Sound culls: 1/  Sawtimber- size trees Poletimber- size trees	454.7 377.1	5,763 5,426	30.7	370 59	424.0 373.1	5,393 5,367
Total						
Rotten culls	831.8	11,189	34.7 1.0	429 11	797.1	10,760 43
Total cull trees	836.4	11,243	35.7	440	800.7	10,803
Hardwood limbs	76.5	943			76.5	943
Salvable dead trees	0.2	2	0.2	2		
All timber	2,076.4	27,584	773.4	10,085	1,303.0	17,499

<sup>1/</sup> Includes volume of palm.

Table 14e.--Net volume of timber on commercial forest land, by species group and class of material, South Florida, 1959

Class of material	Т	otal	Softwo	ood	Hard	lwood
	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords	Million cu. ft.	Thousand cords
Sawtimber trees:						
Saw-log portion Upper stem	198.7 61.3	2,383 758	191.9 57.4	2,299 711	6.8 3.9	84 47
Total	260.0	3,141	249.3	3,010	10. 7	131
Poletimber trees	118.1	1,748	110.4	1,625	7.7	123
Total grow- ing stock	378.1	4,889	359.7	4,635	18.4	254
Cull trees:  Sound culls: 1/ Sawtimber- size trees Poletimber- size trees	130.3 151.4	1,640 2,180	30.6 11.9	366 171	99. 7 139. 5	1,274 2,009
Total	281.7	3,820	42.5	537	239.2	3,283
Rotten culls	2.3	28	1.6	21	0.7	7
Total cull trees	284.0	3,848	44.1	558	239.9	3,290
Hardwood limbs	4.6	57			4.6	57
Salvable dead trees	0.2	2	0.2	2		
All timber	666.9	8,796	404.0	5,195	262.9	3,601

<sup>1/</sup> Includes volume of palm.

Table 15. -- Net volume of sawtimber on commercial forest land, by diameter class and species, Florida, 1959

		(In million board feet)	ard feet)			
č	A11		Q	Diameter class (inches)	es)	
Species	classes	10	12	14	16-18	20+
Yellow pine:						
	2 060 4	1 090 6	2 2 2 2 2	0 0 0	2 200	0.01
Slock wing	4 435 5	1,550.0	1,000.1	0.000	0.000	105.0
Jabin pine	1 300 3	2,000,0	210 5	970.5	4.000	160.6
Dand aire	7,000,1	2.0.2	2000	0.01	#*17# u oc	100.0
Pond pine	2002.0	38.0	0.87	2.26	36.3	10.4
Omer yenow pane	6.4.70	0.00	0.00	T-4.1	1101	10.0
Total	10,273.7	3,704.7	3,111.4	1,741.5	1,390.8	325.3
Other softwoods:						
Cypress	4,394.8	870.7	1,118,6	945.9	894.4	565.2
Cedar	76.0	25.1	13.0	32.4	1.1	4.4
Total	4,470.8	895.8	1,131.6	978.3	895.5	569.6
Total softwoods	14,744.5	4,600.5	4,243.0	2,719.8	2,286.3	894.9
Preferred hardwoods:						
Sweetgum	667.1	1	140.7	155.7	194.6	176.1
Yellow-poplar	63.8	;	18.3	12.3	28.6	4.6
White and swamp chestnut oaks	94.7	:	11.4	25.6	37.7	20.0
Cherrybark and shumard oaks	32.1	4 3	:	2.2	16.2	10.2
Ash	418.6	:	98.1	73.0	171.0	76.5
Hard maple	7.6	**	2.5			5.1
Total	1,283.9	8	271.0	272.3	448.1	292.5
Other hardwoods:						
Tupelo and blackgum	2,059.0	;	393.1	450.5	643.3	572.1
Soft maple	389.1	;	84.7	108.2	118.1	78.1
Other white oaks	768.2	;	32,3	58.2	224.3	453.4
Other red oaks	1,653.6	;	299.5	337.2	381,1	635.8
Hickory	407.9	:	73.1	102.0	121.8	111.0
Beech	25.1	:	:	2.7	7.0	15.4
Holly, dogwood, persimmon	:	;	:	;	;	1
Other hardwoods	1,053.1	1	285.5	254.4	338.0	175.2
Total	6,356.0	1	1,168.2	1,313.2	1,833,6	2,041.0
Total hardwoods	7,639.9	-	1,439.2	1,585.5	2,281.7	2,333.5
All species	22,384.4	4,600.5	5,682.2	4,305.3	4,568.0	3,228.4
Salvable dead trees	5.9	1.7	1.5	1.3	1.3	0.1

Table 16. --Net volume of growing stock on commercial forest land, by diameter class and species, Florida, 1959

														5,50		
t		1						Д	Diameter class (inches)	ass (inches						
Species	AII	All classes		9	~	82	10	0	12		14		16	16-18	20+	±
	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million 7	Thousand	Million cu. ft.	Thousand	Million T	Thousand	Million T	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand
Yellow pine: Longleaf pine Slash pine Loblolly pine Pond pine	1, 260.9 1, 417.2 354.1 92.2	17, 686 19, 892 4, 696 1, 279	104.1 169.6 19.0 8.0	1, 768 2, 906 323 139	315.1 314.4 36.6 21.6	4, 705 4, 681 544 318	382.5 340.8 61.4 22.2	5, 264 4, 706 844 304	294. 0 283. 1 69. 5 18. 7	3, 876 3, 748 910 246	115.6 166.3 58.2 10.8	1, 460 2, 098 738 139	47.4 122.2 80.0 7.0	586 1,507 991 86	2.00.2 2.00.8 2.00.8 2.00.8	27 246 346 47 28
Other yearow pane Total	3,243.0	4	332.0	5, 666	722.5	10, 771	817.1	11, 256	682.0	9,000		4,561	269.8	3, 333	58.8	694
Other softwoods: Cypress Cedar	1, 465. 0	17, 987	136.6	2, 085	222.3	2,984	276.4	3, 445	305.7	3, 635	225.3 8.2	2,586	192.4	2, 139 5	106.3	1, 113
Total	1,500.1	18, 432	141.5	2, 157	233.1	3, 127	282.8	3, 525	309.3	3,678	233.5	2,680	192.9	2, 144	107.0	1, 121
Total softwoods	4, 743. 1	63, 713	473. 5	7,823	955.6	13, 898	1,099.9	14, 781	991.3	12, 678	594.3	7,241	462.7	5,477	165.8	1, 815
Preferred hardwoods: Sweetgum Yellow-poplar	260.6	3, 525 375	16.2	288 26	34.4	524	49.2	680 81	35.8 5.8	482 82	41.1	525 36	47.9	596 76	36.0	430
White and swamp chestnut oaks	22.9	298	0.3	4	1.9	30	1.8	26	2.8	39	5.8	74	7.2	89	3. 1	36
Cherrybark and shumard oaks Ash Hard maple	6.7 166.1 4.1	85 2, 297 57	19.9	350	30.2 0.4	3 456 6	25.0 1.6	350	23.5	310	1.3	234	33.8	28 415	3.0 15.3 1.3	37 182 17
Total	487.4	6, 637	37.9	670	71.0	1,079	83.6	1, 159	68.6	923	69.4	886	97.1	1,204	59.8	716
Other hardwoods:																
Tupelo and blackgum Soft maple	722.7 169.0		45.5	786 353	87.5	1,324	121.2 25.1	1, 672 351	105. 1 22. 7	1,407	106.0	1, 357 381	143.8 28.8	1,783 356	113.6 16.4	1, 378
Other white oaks	238.1	3,070	8.5	153	14.9	231	19.4	272	14.0	187	19, 1	246 998	59.3 88.5	740 1. 106	102.9	1,241 1,589
Hickory	129.1		6.0	107	13.1	198	11.6	161	19,1	257	27.3	344	28.2	354	23.8	289
Holly, dogwood,					5						;	•	;	1		
persimmon Other hardwoods	1.8	25 6,005	44.8	782	62.6	952	1.8	25 1, 139	73.4	966	60.5	777	73.8	913	36.9	446
Total	2, 252.7	30, 354	175.6	3, 071	260.0	3,937	337.5	4,682	305.7	4, 107	321.5	4, 112	423.9	5, 271	428.5	5, 174
Total hardwoods	2, 740. 1	36, 991	213.5	3, 741	331.0	5,016	421.1	5, 841	374.3	5, 030	390.9	4,998	521.0	6,475	488.3	5, 890
All species	7, 483. 2	100, 704	687.0	11, 564	1,286.6	18, 914	1, 521.0	20, 622	1, 365. 6	17, 708	985.2	12,239	983. 7	11,952	654.1	7, 705

Table 17a. --Net volume of timber on commercial forest land, by diameter class, species group, and class of material, for the entire State of Florida, 1959

Species group and									Diameter	Diameter class (inches)	es)					
class of material	All	All classes		9	w	8	10		1	12	14		16-18	81	20+	±
	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousend	Million cu. ft.	Thousand
Growing stock:																
Softwood Hardwood	4, 743. 1 2, 740. 1	63, 713 36, 991	473.5	7,823	955.6 331.0	13, 898 5, 016	1, 099.9 421.1	14, 781 5, 841	991. 3 374. 3	12, 678 5, 030	390.9	7,241	462.7	5, 477 6, 475	165.8	1,815 5,890
Total	7, 483.2	100, 704	687.0	11,564	1, 286.6	18, 914	1,521.0	20,622	1, 365.6	17,708	985.2	12, 239	983.7	11, 952	654. 1	7, 705
Cull timber:																
Sound culls: Softwood	201.2	2, 565	19.6	313	20.4	282	61.0	787	36.9	456	26.7	317	23.2	266	13.4	144
Hardwood	1, 182. 3	16, 347	155.2	2,714	154.5	2,349	177.5	2, 482	194.5	2, 571	144.2	1,841	188.2	2,349	168, 2	2,041
Total	1, 383.5	18,912	174.8	3,027	174.9	2,631	238.5	3, 269	231.4	3,027	170.9	2, 158	211.4	2,615	181.6	2, 185
Palm	1,210.3	16, 180	2.5	43	117.2	1, 741	476.6	6, 532	463,8	5, 982	117.4	1,477	32.5	401	0.3	4
Rotten cuils	45.2	573	5.4	91	4.5	71	3,6	47	3.0	37	4.8	61	5.2	59	18.7	207
Total culls	2, 639.0	35, 665	182.7	3, 161	296.6	4, 443	718.7	9,848	698.2	9,046	293. 1	3, 696	249.1	3,075	200.6	2, 396
Hardwood limbs	390.2	4,819	1	:	1	1	+	-	35.0	462	48.6	620	98.2	1,217	208.4	2,520
All timber	10, 512, 4	10, 512, 4 141, 188	869.7	14,725	1, 583.2	23, 357	2, 239.7	30,470	2, 098.8	27, 216	1, 326. 9	16, 555	1, 331.0	16, 244	1, 063. 1	12, 621

Table 17b. --Net volume of timber on commercial forest land, by diameter class, species group, and class of material, Northeast Florida, 1959

Species group and									Diameter	Diameter class (inches)	(se)					
class of material	ATI C	All classes	9		8		10	0	1:	12	1.	14	16-	16-18	20+	±
	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand
Growing stock:																
Softwood Hardwood	2, 138. 2 1, 172. 8	28, 875 15, 783	216.9	3,603	417.3	6,089 2,065	525. 3 171. 1	7,064 2,376	490.7	6, 267 2, 197	260.8 164.5	3, 185 2, 101	178. 4 215. 6	2, 125 2, 676	48.8	542 2, 646
Total	3, 311.0	44,658	315.4	5, 325	554.7	8, 154	696.4	9, 440	657.3	8, 464	425.3	5, 286	394.0	4, 801	267.9	3, 188
Cull timber:																
Sound culls; Softwood Hardwood	66.8 519.6	859	4.8	1,072	5.2	75 995	20.2	264	11.7	152 1.168	13.2	160 840	6.5	74	5.2	57
Total	586.4	8,026	62.9	1,149	70.5	1, 070	110.3	1, 512	99.8	1, 320	78.9	1,000	88.9	1, 104	72.1	871
Palm	415.8	5, 533	0.3	ro	28.8	430	158.3	2, 166	175.8	2,271	41.2	519	11.4	142	;	+
Rotten culls	17.7	234	2.8	47	2.7	41	1.5	18	1.0	12	2.1	26	1.4	17	6.2	73
Total culls	1, 019.9	13, 793	69.0	1,201	102.0	1, 541	270.1	3, 696	276.6	3, 603	122. 2	1,545	101.7	1, 263	78.3	944
Hardwood limbs	165.8	2,050	1	-	1	i i	1	1	15.6	206	21.5	275	40.4	501	88.3	1, 068
All timber	4, 496.7	60, 501	384.4	6,526	656.7	9, 695	966.5	13, 136	949.5	12, 273	569.0	7, 106	536. 1	6, 565	434.5	5, 200

Table 17c. --Net volume of timber on commercial forest land, by diameter class, species group, and class of material, Northwest Florida, 1959

Special automatical									Diamete	Diameter class (inches)	hes)					
class of material	All cl	All classes		9	0		П	10		12	14		16	16-18	20+	+
	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand
Growing stock; Softwood Hardwood	1, 507.7	20, 560	139.2	2, 339	326.3	4, 826 2, 036	336.7 181.6	4,585	292.8 144.2	3, 816 2, 000	186.4 165.4	2, 326 2, 107	168.2	2, 023 2, 881	58.1 186.4	645
Total	2, 630.8	35, 761	219.4	3, 750	460.0	6, 862	518.3	7, 102	437.0	5, 816	351.8	4, 433	399.8	4,904	244.5	2,894
Cull timber:																THE SECOND CONTRACTOR OF THE SECOND CONTRACTOR
Sound culls: Softwood Hardwood	57, 2	740	5.9	99	8.2 49.8	114	18.2	237	6.3	80 775	7.5	87 655	7.9	90	3.2	33 757
Total	446.6	6, 105	56.4	916	58.0	869	69.5	962	64.6	855	58.6	742	73.4	911	66.1	790
Palm	31, 5	419	1	1	3.1	46	12.3	166	13.4	173	2.4	30	0.3	4	1	;
Rotten culls	20.6	257	2.0	34	1.2	21	1.6	24	1.3	16	2.1	27	2.3	26	10.1	109
Total culls	498.7	6, 781	58.4	1,010	62.3	936	83. 4	1, 152	79.3	1, 044	63.1	799	76.0	941	76.2	899
Hardwood limbs	143, 3	1,769	1	-	1	ľ		:	11.9	156	17.9	229	39, 5	490	74.0	894
All timber	3, 272.8	44, 311	277.8	4,760	522.3	7, 798	601.7	8, 254	528.2	7,016	432.8	5, 461	515.3	6, 335	394.7	4, 687

	Table 1	d Net vol	ume of tim	Table 1/GNet volume of timber on commercial forest land, by diameter class, species group, and class of material, Central Florida, 1959	sercial for	est land, by	diameter	class, speci	es group,	and class or	material,	Central Fic	orida, 1908			
Species group and			,				!		Diameter	Diameter class (inches)	es)					
class of material	AII	All classes	9		8		10	0		12	H	14	16	16-18	20	20+
	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand
Growing stock:																
Softwood Hardwood	737.5	9,643	71.2	1,159	147.8 57.1	2,080	162.6	2,161	140.0	1,761	96.7	1, 141 754	86.5	989 875	32, 7 80, 1	352 964
Total	1, 163. 3	15, 396	103.8	1,727	204.9	2,951	228.3	3,070	201.9	2, 573	154.8	1,895	156.8	1,864	112.8	1, 316
Cull timber:																
Sound culls: Softwood Hardwood	34.7	429	2.0 35.3	32 615	2.0	27 498	12. 1 32. 3	153 456	8.4	98 592	2.4	28 308	5.6	66	2, 2 37. 6	25 461
Total	280.4	3, 822	37.3	647	34.7	525	44.4	609	54.1	069	26.9	336	43.2	529	39.8	486
Palm	551.4	7, 367	1.6	26	40.2	597	231.0	3, 175	200.9	2, 597	58.7	739	19.0	233	1	i ž
Rotten culls	4.6	54	0.1	4	0.3	4	0.5	ည	0.3	4	0.2	က	1.1	12	2.1	22
Total culls	836.4	11, 243	39.0	677	75.2	1,125	275.9	3, 789	255. 3	3, 291	85.8	1, 078	63. 3	774	41.9	508
Hardwood limbs	76.5	943	1	:	1	:	1	-	7.1	94	8.4	106	16.7	206	44.3	537
All timber	2,076.2	27, 582	142.8	2, 404	280.1	4,077	504.2	6,859	464.3	5, 958	249.0	3, 079	236.8	2,844	199.0	2, 361

Table 17e. --Net volume of timber on commercial forest land, by diameter class, species group, and class of material, South Florida, 1959

Species group and									Diameter	Diameter class (inches)	es)					
class of material	All c.	All classes	9	9	8		1	10		12		14	16-	16-18	20+	±
	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand	Million cu. ft.	Thousand
Growing stock:																
Softwood Hardwood	359.7	4, 635	46.2	. 722	64.2	903	75.3	971	67.8	834	50.4	589 36	29.6 3.5	340	26.2	276
Total	378.1	4, 889	48.4	762	67.0	947	78.0	1,010	69.4	855	53.3	625	33, 1	383	28.9	307
Cull timber:																
Sound culls: Softwood Hardwood	42.5	537		105	5.0	66	10.5	133	10.5	126	6. c	42 38	3.2	36	2.8	29
Total	70.1	959	15.2	255	11.7	167	14.3	186	12.9	162		80	5.9	71	3.6	38
Palm	211.6	2, 861	9.0	12	45. 1	899	75.0	1,025	73.7	941	15.1	189	1.8	22	0.3	4
Rotten culls	2.3	28	0.5	9	0.3	c	i i	1	9.4	ις	0.4	ū	0.4	4	0.3	က
Total culls	284.0	3, 848	16.3	273	57. 1	840	89.3	1,211	87.0	1, 108	22.0	274	8, 1	97	4.2	45
Hardwood Hmbs	4.6	57	i s	-	1	e e	-	1	0.4	9	0.8	10	1.6	20	1, 8	21
All timber	666.7	8, 794	64.7	1,035	124.1	1, 787	167.3	2, 221	156.8	1, 969	76.1	606	42.8	200	34.9	373

Table 18. --Net volume of sawtimber on commercial forest land, by species group and tree grade, Florida, 1959 (In million board feet)

	All		Tree gr	rade <u>1</u> /	
Species group	grades	1	2	3	4
Softwoods:				,	
Pine	10, 273. 7	132.5	3,050.3	6, 776.5	314.4
Cypress	4, 394, 8	348.1	1,956.1	1,950.9	139.7
Cedar	76.0	8. 0	15.5	45.3	7.2
Total	14, 744. 5	488.6	5,021.9	8, 772. 7	461.3
Hardwoods:					
Tupelo and blackgum	2,059.0	648.4	796.6	578.4	35.6
Yellow-poplar	63.8	8.8	20.0	30.6	4.4
Sweetgum	667.1	173.7	253.5	209.9	30.0
Preferred oaks 2/	126.8	26.0	65.0	27.2	8.6
Other oaks	2,421.8	501.8	912.1	756.8	251, 1
Hickory	407.9	110.5	152.4	127.5	17.5
All other hardwoods	1, 893. 5	386.5	710.4	704.6	92.0
Total	7, 639. 9	1,855.7	2,910.0	2, 435.0	439.2
All species	22, 384. 4	2, 344. 3	7,931.9	11, 207. 7	900.5

<sup>1/</sup> Tree grade based on log grade of butt log. (See Appendix for definition of log grade and butt log.)

Table 19a, --Number of growing stock, cull, and salvable dead trees on commercial forest land, by species group and diameter class, for the entire State of Florida, 1959

#### (In thousand trees)

		,	****	(I	n thousand	trees/						
Tree quality and	m-4-1					Diameter	class (inch	nes)				
species group	Total	2	4	6	8	10	12	14	16	18	20	22+
Growing stock:												
Softwood Hardwood	2,786,211 2,059,238	1, 338, 541 1, 307, 153	682,176 389,360	345, 140 154, 099	205, 649 85, 232	111,538 52,245	62,343 27,635	25, 522 18, 965	9,355 10,806	3, 523 5, 773	1,472 3,664	952 4, 306
Total	4, 845, 449	2,645,694	1,071,536	499, 239	290, 881	163, 783	89, 978	44, 487	20, 161	9, 296	5, 136	5,258
Sound culls:												
Softwood Hardwood	126,573 1,945,098	61, 883 1, 390, 863	27,973 309,208	16, 234 121, 929	6,263 52,905	8,662 30,389	2,748 18,780	1,543 9,381	628 5,421	369 2,543	148 1,514	122 2, 165
Total	2,071,671	1,452,746	337, 181	138, 163	59,168	39,051	21,528	10,924	6,049	2, 912	1,662	2, 287
Rotten culls:												
Softwood Hardwood	45,327 116,985	35, 557 86, 574	6,075 16,264	1,417 7,041	1,148 2,558	250 1,795	232 857	284 716	94 158	46 433	83 241	141 348
Total	162, 312	122, 131	22, 339	8, 458	3,706	2,045	1,089	1,000	252	479	324	489
Palm	94, 506			1,563	18,707	40, 260	27, 382	5,553	840	189	12	
Salvable dead trees	120			32	8	44	14	13	6	2	1	
All trees	7, 174, 058	4, 220, 571	1, 431, 056	647, 455	372,470	245, 183	139, 991	61,977	27, 308	12,878	7, 135	8, 034

 $<sup>\</sup>underline{2}/ \ \ \, \text{Includes } \underline{Q}. \ \ \, \underline{alba}, \ \ \, \underline{Q}. \ \ \, \underline{michauxii}, \ \, \underline{Q}\,. \ \ \, \underline{falcata} \ \, \text{var. } \underline{pagodaefolia, and } \underline{Q}. \ \ \, \underline{shumardii}.$ 

Table 19b. --Number of growing stock, cull, and salvable dead trees on commercial forest land, by species group and diameter class, Northeast Florida, 1959

(In thousand trees)

Tree quality and	Total					Diameter	class (inc	hes)				
species group	1000	2	4	6	8	10	12	14	16	18	20	22+
Growing stock:												
Softwood Hardwood	1,429,157 972,596	727, 198 630, 385	356,614 181,615	161, 222 72, 688	86,638 35,967	51, 343 21, 426	29, 598 12, 276	10,863 7,874	3, 754 4, 279	1,163 2,522	501 1,722	263 1,842
Total	2, 401, 753	1, 357, 583	538, 229	233, 910	122,605	72, 769	41,874	18,737	8, 033	3,685	2, 223	2, 105
Sound culls:											-	
Softwood Hardwood	38,535 660,059	20, 889 446, 568	7,099 113,887	4, 417 45, 571	1,663 21,674	2,671 14,883	787 8, 383	652 4,281	161 2,415	97 995	60 494	39 908
Total	698, 594	467, 457	120,986	49, 988	23, 337	17, 554	9,170	4, 933	2, 576	1,092	554	947
Rotten culls:							VA. P. L					
Softwood Hardwood	28,636 52,061	24, 258 36, 872	4,108 7,262	4, 188	244 1,538	 791	359	 534	 67	147	 147	26 156
Total	80, 697	61, 130	11, 370	4, 188	1,782	791	359	534	67	147	147	182
Palm	26, 272			245	3, 644	12,067	8, 551	1,481	223	61		
Salvable dead trees	82			32	8	22	9	Ġ	5			
All trees	3, 207, 398	1,886,170	670,585	288, 363	151, 376	103, 203	59,963	25, 691	10, 904	4,985	2,924	3, 234

Table 19c. --Number of growing stock, cull, and salvable dead trees on commercial forest land, by species group and diameter class, Northwest Florida, 1959
(In thousand trees)

Tree quality and	Total					Diameter	class (inch	es)				
species group	10141	2	4	6	8	10	12	14	16	18	20	22⊤
Growing stock:												
Softwood Hardwood	710, 846 750, 060	306, 314 472, 200	179, 313 137, 572	93, 351 55, 943	65, 845 33, 636	33, 871 22, 231	18, 538 10, 428	8,196 7,890	3, 298 4, 889	1, 322 2, 342	455 1,337	343 1,592
Total	1,460,906	778, 514	316, 885	149, 294	99,481	56, 102	28, 966	16,086	8, 187	3,664	1, 792	1,935
Sound culls:												
Softwood Hardwood	38, 239 942, 078	19,604 739,299	6,822 122,484	5,223 41,764	2,497 17,174	2,659 9,034	578 5, 261	451 3,004	232 1, 766	118 948	40 603	15 741
Total	980, 317	758, 903	129, 306	46, 987	19,671	11,693	5, 839	3, 455	1,998	1,066	643	756
Rotten culls:												
Softwood Hardwood	8,216 42,083	4, 769 30, 536	1,418 7,116	705 2, 134	412 864	159 591	180 380	245 75	94 65	46 130	83 65	105 127
Total	50, 299	35, 305	8,534	2,839	1,276	750	560	320	159	176	148	232
Palm	2, 182				451	957	673	74		27		
Salvable dead trees	11					8		3				
All trees	2, 493, 715	1,572,722	454,725	199, 120	120,879	69, 510	36, 038	19, 938	10, 344	4,933	2, 583	2,923

Table 19d. --Number of growing stock, cull, and salvable dead trees on commercial forest land, by species group and diameter class, Central Florida, 1959

(In thousand trees)

Tree quality and	mada1					Diameter	class (inch	es)				
species group	Total	2	4	6	8	10	12	14	16	18	20	22+
Growing stock:												
Softwood Hardwood	421,653 314,001	203, 649 192, 175	93,532 64,176	54, 691 23, 387	36,217 14,535	17,510 8,148	9, 193 4, 772	4,051 3,000	1,651 1,547	721 860	242 565	196 836
Total	735, 654	395, 824	157,708	78, 078	50,752	25, 658	13, 965	7,051	3, 198	1,581	807	1,032
Sound culls:												
Softwood Hardwood	14, 489 289, 573	4, 882 176, 116	4,882 58,853	1,605 27,910	531 11,763	1,552 5,692	580 4,788	167 1,872	171 1, 145	63 526	33 417	23 491
Total	304, 062	180, 998	63,735	29, 515	12,294	7, 244	5, 368	2,039	1,316	589	450	514
Rotten culls:												
Softwood Hardwood	2,339 15,755	1, 819 12, 536	163 1,502	719	256 156	91 413	 118	 107	 26	104	9	10 65
Total	18,094	14, 355	1,665	719	412	504	118	107	26	104	9	75
Palm	39,835			506	6,052	18, 343	11,529	2, 821	497	87		
Salvable dead trees	16					14				2		
All trees	1,097,661	591, 177	223, 108	108, 818	69,510	51, 763	30, 980	12,018	5, 037	2,363	1, 266	1, 621

Table 19e. --Number of growing stock, cull, and salvable dead trees on commercial forest land, by species group and diameter class, South Florida, 1959

(In thousand trees)

Tree quality and						Diameter	class (inch	es)				
species group	Total	2	4	6	8	10	12	14	16	18	20	22+
Growing stock:												
Softwood Hardwood	224, 555 22, 581	101, 380 12, 393	52,717 5,997	35, 876 2, 081	16,949 1,094	8, 814 440	5, 014 159	2, 412 201	652 91	317 49	274 40	150 36
Total	247, 136	113, 773	58,714	37, 957	18,043	9, 254	5, 173	2,613	743	366	314	186
Sound culls:												
Softwood Hardwood	35, 310 53, 388	16,508 28,880	9,170 13,984	4, 989 6, 684	1,572 2,294	1,780 780	803 348	273 224	64 95	91 74	15 	45 25
Total	88, 698	45, 388	23, 154	11, 673	3, 866	2,560	1, 151	497	159	165	15	70
Rotten culls:												
Softwood Hardwood	6,136 7,086	4,711 6,630	386 384	712 	236		52 	39 		 52	 20	
Total	13,222	11, 341	770	712	236		52	39		52	20	
Palm	26, 217			812	8,560	8,893	6,629	1, 177	120	14	12	
Salvable dead trees	11						5	4	1		1	
All trees	375, 284	170, 502	82,638	51, 154	30, 705	20, 707	13,010	4, 330	1,023	597	362	256

Table 20a. -- Average net sawtimber volume per acre on commercial forest land, by ownership, major forest type, and species group, for the entire State of Florida, 1959

(In board feet)

Type and species group	All ownerships	National forest	Indian	Other Federal 1/	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:								
Softwood Hardwood	782 13	1,420 5		757 	1,262	964 8	539 21	662 14
Total	795	1,425		757	1,262	972	560	676
Oak-pine type:								
Softwood Hardwood	1,414 251	1,220	~ ~	716 25	765 	2,225 491	1,388 231	1,047 191
Total	1,665	1,220		741	765	2,716	1,619	1,238
Hardwood types:								
Softwood Hardwood	638 908	1,421 824		314 290	600 <b>4</b> 96	959 1,521	541 786	529 784
Total	1,546	2,245	un co	604	1,096	2,480	1,327	1,313
All types:								
Softwood Hardwood	753 390	1,413 202		539 143	1,069 130	1,025 568	584 345	614 381
Total	1,143	1,615		682	1,199	1,593	929	995

<sup>1/</sup> Includes Bureau of Land Management.

Table 20b. --Average net sawtimber volume per acre on commercial forest land, by ownership, major forest type, and species group, Northeast Florida, 1959

Type and species group	All ownerships	National forest	Indian	Other Federal 1	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:	<u> </u>		<u>}</u>					
Softwood Hardwood	1,040 14	1,296			1,349	1,096 8	1,149 16	850 23
Tota1	1,054	1,296			1,349	1,104	1, 165	873
Oak-pine type:								
Softwood Hardwood	1,723 358	2,840				2,366 519	1,388 216	1,292 348
Total	2,081	2,840			***	2,885	1,504	1,640
Hardwood types:								
Softwood Hardwood	704 1,103	1,750 1,168			191 466	1,010 1,238	587 1,141	494 1,002
Total	1,807	2,918	/w ==	~	657	2,248	1,728	1,496
All types:								
Softwood Hardwood	945 471	1,402 195			1,124 90	1,137 478	902 580	711 480
Total	1,416	1,597			1,214	1,615	1,482	1,191

<sup>1/</sup> Includes Bureau of Land Management.

Table 20c.--Average net sawtimber volume per acre on commercial forest land, by ownership, major forest type, and species group, Northwest Florida, 1959

# (In board feet)

Type and species group	All ownerships	National forest	Indian	Other Federal 1	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:								
Softwood Hardwood	1,067 29	1,596 10		992 	1,853	789 8	1,301 125	988 30
Total	1,096	1,606		992	1,853	797	1,426	1,018
Oak-pine type:								
Softwood Hardwood	1,296 217	767 		716 25	727 	1,971 441	1,553 397	1,125 65
Total	1,513	767		741	727	2,412	1,950	1,190
Hardwood types:								
Softwood Hardwood	465 1,218	1,479 810		339 305	781 570	671 2,038	270 1,056	274 1,102
Total	1,683	2,289		644	1,351	2,709	1,326	1,376
All types:								
Softwood Hardwood	823 550	1,529 227	 	610 163	1,460 157	800 706	796 624	617 598
Total	1,373	1,756		773	1,617	1,506	1,420	1,215

<sup>1/</sup> Includes Bureau of Land Management.

Table 20d.--Average net sawtimber volume per acre on commercial forest land, by ownership, major forest type, and species group, Central Florida, 1959

#### (In board feet)

			(2	ard rect,				
Type and species group	All ownerships	National forest	Indian	Other Federal 1	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:								
Softwood Hardwood	317 1	631	 	117	1,403	1,235 34	205 1	389 
Total	318	631		117	1,403	1,269	206	389
Oak-pine types:								
Softwood Hardwood	795 33	792 			884	**	893 31	665 46
Total	828	792			884		924	711
Hardwood types:								
Softwood Hardwood	643 537	341 68		58 164	811 568	3,164 415	633 503	497 600
Total	1,180	409		222	1,379	3,579	1,136	1,097
All types:								
Softwood Hardwood	463 224	520 30		103 39	1,127 240	2,464 277	377 188	445 281
Total	687	550		142	1,367	2,741	565	726

<sup>1/</sup> Includes Bureau of Land Management.

Table 20e. -- Average net sawtimber volume per acre on commercial forest land, by ownership, major forest type, and species group, South Florida, 1959

	Misc. private		340	:	340		322		322		1,090	58	1,148		662	25	687
	Farm		235	;	235		2,332		2,332		753	40	793		396	<b>o</b>	405
	Forest		;	1	:		;	-	1		;	-	:		;	10	:
	State, county, and municipal		172	:	172		;	:	1		;	:	:		149	-	149
(In board feet)	Other Federal 1/		(7)	:	(3/)		;		1		;		1		(2/)	:	(7/2)
oq uI)	Indian		1	:	;		1		:		;		;		;	:	:
	National forest		;	:	:		1		:		:		1		1	:	:
	All ownerships National forest		294	:	294		840		840		971	52	1,023		550	19	569
	Type and species group	Pine types:	Softwood	Hardwood	Total	Oak-pine types:	Softwood	Hardwood	Total	Hardwood types:	Softwood	Hardwood	Total	All types:	Softwood	Hardwood	Total

I/ Includes Bureau of Land Management.
2/ Excluded because of excessive sampling error.

Table 21a, --Average net volume per acre of growing stock and cull timber  $\mathcal U$  on commercial forest land, by ownership, major forest type, and species group, for the entire State of Florida, 1959

Forest type, species group, and class of material		11 rships	i .	ional rest	Inc	lian	Oth Fede	er ral <u>2</u> /		county, micipal	l .	orest	Fa	ırm		isc. vate
	Cubic feet	Cords	Cubic	Cords	Cubic	Cords	Cubic feet	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords
Pine types:																
Growing stock:																
Softwood Hardwood	283.1	3.9 0.1	506.2 2.6	7.2 ( <u>3</u> /)			295. 7 3. 4	4.2 0.1	322.1 0.7	4. 4 ( <u>3</u> /)	329.9 5.4	4.7 0.1	179.6 7.0	2.5 0.1	280. 2 5. 4	3.8 0.1
Total	288.5	4.0	508.8	7.2			299.1	4.3	322.8	4.4	335.3	4.8	186.6	2.6	285.6	3.9
Cull timber:																
Softwood Hardwood	5.9 9.2	0.1	12.4 0.5	0, 2 ( <u>3</u> /)			15.5 19.0	0.2 0.3	2.5 0.5	( <u>3</u> /) ( <u>3</u> /)	5, 4 3, 6	0.1 ( <u>3</u> /)	4.0 6.3	0. 1 0. 1	6.1 17.8	0.1 0.2
Total	15.1	0, 2	12.9	0.2			34.5	0.5	3.0	( <u>3</u> /)	9.0	0.1	10.3	0.2	23. 9	0.3
Oak-pine type:																
Growing stock:																
Softwood Hardwood	371.9 105.3	4.9 1.5	330.1 69.6	4.5 1.2			193.0 26.2	2.6 0.4	263.5 43.2	3.6 0.7	639.4 132.7	8.4 1.8	342.8 125.8	4.6 1.8	246.2 93.4	3.3 1.3
Total	477. 2	6.4	399.7	5.7			219.2	3.0	306.7	4. 3	772. 1	10.2	468.6	6.4	339.6	4.6
Cull timber:																
Softwood Hardwood	11.4 137.8	0.2 1.9	28. 4 25. 8	0.4 0.5			2.8 49.6	( <u>3</u> /) 0.7	25.9	0.4	22.3 107.2	0.3 1.5	10.8 250.5	0. 1 3. 4	4.0 97.8	0.1 1.4
Total	149.2	2.1	54.2	0.9			52.4	0.7	25.9	0.4	129.5	1.8	261.3	3, 5	101.8	1.5
Hardwood types:																
Growing stock:																
Softwood Hardwood	172.9 323.0	2.1 4.4	388.9 305.4	4.7 4.2	121. 7 	1, 7	87.6 94.6	1. 1 1. 3	182.0 185.3	2.3 2.5	286.4 485.9	3.5 6.5	160.0 309.5	2.0 4.2	120.9 284.8	1.5 3.8
Total	495.9	6.5	694.3	8.9	121.7	1.7	182.2	2.4	367.3	4.8	772.3	10.0	469.5	6.2	405.7	5.3
Cull timber:																
Softwood Hardwood	18.0 274.5	0. 2 3. 7	75.3 207.8	0.9 2.9	164.0 79.4	2. 1 1. 0	7.4 159.4	0.1 2.2	19.8 133.9	0.2 1.9	18.1 272.0	0.2 3.7	10.2 293.7	0. 1 4. 0	18.7 284.8	0.2 3.9
Total	292.5	3. 9	283.1	3.8	243.4	3. 1	166.8	2.3	153.7	2. 1	290.1	3. 9	303.9	4. 1	303.5	4. 1
All types:																
Growing stock:																
Softwood Hardwood	242.2 139.9	3. 3 1. 9	471.3 77.9	6.5 1.1	121.7	1.7	182.7 50.1	2.5 0.7	283.2 50.6	3. 8 0. 7	329.8 182.0	4.4 2.4	180.0 137.1	2.4 1.9	204.3 139.5	2.7 1.9
Total	382.1	5. 2	549.2	7.6	121.7	1. 7	232.8	3. 2	333.8	4.5	511.8	6.8	317.1	4. 3	343.8	4.6
Cull timber:																
Softwood Hardwood	11.1 123.7	0. 1 1. 7	28. 1 51. 3	0.4 0.7	164.0 79.4	2. 1 1. 0	10.0 90.6	0. 1 1. 3	6.9 36.3	0. 1 0. 5	10.8 103.8	0. 1 1. 4	6.9 136.6	0. 1 1. 9	11.9 145.8	0.2 2.0
Total	134.8	1.8	79.4	1.1	243.4	3. 1	100.6	1.4	43.2	0.6	114.6	1.5	143.5	2.0	157.7	2.2
			628, 6													

<sup>1/</sup> Includes volume of palm.
2/ Includes Bureau of Land Management.
3/ Less than 0.05 cord per acre.

Table 21b. --Average net volume per acre of growing stock and cull timber  $\frac{1}{2}$  on commercial forest land, by ownership, major forest type, and species group, Northeast Florida, 1959

Forest type, species group, and class of material		All rships		ional rest	Inc	lian	Oth Fede	er ral 2/	State,	county, micipal		rest	Fa	ırm		sc. vate
	Cubic feet	Cords	Cubic feet	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic	Cords
Pine types:																
Growing stock:																
Softwood Hardwood	336, 5 6, 4	4.7 0.1	498.8	7.1					300.3	4.1	366.5 6.1	5.2 0.1	321.5 5.3	4.5 0.1	275.1 9.3	3.9 0.1
Total	342.9	4.8	498.8	7. 1					300.3	4.1	372.6	5, 3	326.8	4.6	284.4	4.0
Cull timber:																
Softwood Hardwood	8. 1 8. 4	0.1 0.1	12.9	0.2					7, 8 	0.1	6.9 3.0	0.1 ( <u>3</u> /)	8. 3 6. 4	0.1 0.1	8.0 17.9	0.1
Total	16.5	0.2	12.9	0.2					7.8	0.1	9.9	0.1	14.7	0.2	25.9	0.3
Oak-pine type:																
Growing stock:																
Softwood Hardwood	499.0 117.9	6.6 1.6	739.9	9.9							725.2 122.3	9.6 1.6	390.1 85.0	5. 2 1. 2	347.6 153.2	4.7 2.1
Total	616.9	8. 2	739.9	9.9							847.5	11.2	475.1	6.4	500.8	6.8
Cull timber:																
Softwood Hardwood	14.9 206.0	0.2 2.8	107.4	1. 3				<u></u>	<u></u>		22.9 143.1	0.3 2.0	15.2 397.0	0. 2 5. 5	98.4	1.4
Total	220.9	3.0	107.4	1.3							166.0	2.3	412.2	5. 7	98.4	1.4
Hardwood types:																
Growing stock:																
Softwood Hardwood	217.8 381.9	2.7 5.1	409.5 422.4	4.8 5.7					64.7 110.0	0.7 1.4	314.1 429.5	3.9 5.8	186.7 401.3	2.3 5.4	156.9 343.3	2.0 4.6
Total	599.7	7.8	831.9	10.5					174.7	2.1	743.6	9.7	588.0	7.7	500.2	6.6
Cull timber:																
Softwood Hardwood	11.2 289.1	0.1 3.9	269.2	3. 7			 88. 7	1.1	 55.0	0.9	16.1 330.2	0.2 4.5	13.4 172.3	0. 1 2. 4	7.4 325.0	0.1 4.4
Total	300.3	4.0	269.2	3.7		~-	88.7	1.1	55.0	0.9	346. 3	4.7	185.7	2, 5	332.4	4.5
All types:																
Growing stock:																
Softwood Hardwood	298.3 163.6	4.0 2.2	488.7 70.5	6.8 0.9					254.5 21.3	3. 4 0. 3	368.1 164.4	5.0 2.2	263.4 204.7	3. 5 2. 7	225.3 166.9	3. 0 2. 3
Total	461.9	6, 2	559.2	7, 7					275.8	3. 7	532.5	7.2	468.1	6.2	392.2	5.3
Cull timber:																
Softwood Hardwood	9.7 132.6	0.1 1.8	12.7 44.9	0.2 0.6			- <b>-</b> 36.1	0.5	6.3 10.6	0.1 0.2	11.1 128.2	0.1 1.7	11.4 126.5	0.1 1.7	7.4 160.3	0.1 2.2
Total	142. 3	1.9	57.6	0.8			36.1	0.5	16.9	0.3	139.3	1.8	137.9	1, 8	167.7	2, 3
All timber	604.2	8, 1	616.8	8.5			36.1	0.5	292.7	4, 0	671.8	9.0	606.0	8.0	559.9	7.6

Includes volume of palm.
 Includes Bureau of Land Management.
 Less than 0.05 cord per acre.

Table 21c. --Average net volume per acre of growing stock and cull timber  $\frac{1}{2}$  on commercial forest land, by ownership, major forest type, and species group, Northwest Florida, 1959

Forest type, species group, and class of material		ll rships	Nati for	onal est	Ind	ian	Othe Feder	er ral <u>2</u> /		county, inicipal	4	rest ustry	Fa	rm	Mis priv	
	Cubic feet	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords
Pine types:																
Growing stock:																
Softwood Hardwood	366.9 9.5	5. 2 0. 1	528.9 5.1	7.5 0.1			364.9 4.9	5. 2 0. 1	528.7 2.4	7.3 ( <u>3</u> /)	285.8 4.1	4.1 0.1	395. 8 31. 1	5.5 0.4	371.2 10.7	5.2 0.2
Total	376.4	5, 3	534.0	7.6			369.8	5. 3	531.1	7.3	289.9	4.2	426.9	5, 9	381.9	5.4
Cull timber:																
Softwood Hardwood	7.3 4.8	0.1 0.1	11.8 1.1	0, 2 ( <u>3</u> /)			21.9 26.8	0.3 0.4			3.7 3.7	0.1 0.1	6.8 5.6	0.1 0.1	9.3 3.7	0.1 0.1
Total	12.1	0.2	12.9	0.2			48.7	0.7			7.4	0.2	12.4	0.2	13.0	0.2
Oak-pine type: Growing stock:																
Softwood Hardwood	310.6 127.9	4.1 1.9	247.1 117.0	3.5 2.0			193.0 26.2	2.6 0.4	268.3 59.6	3.8 1.0	484.6 151.5	6.3 2.1	339.2 261.4	4.4 3.8	230.8 63.3	3.1 1.0
Total	438.5	6.0	364.1	5.5			219.2	3. 0	327.9	4.8	636.1	8.4	600.6	8. 2	294.1	4.1
Cull timber:																
Softwood Hardwood	9.2 54.4	0.1 0.8	8.7 43.3	0.1 0.8			2.8 49.6	( <u>3</u> /) 0. 7			21.3 42.6	0.3 0.7	99.9	1.4	15.5 33.8	0.2 0.5
Total	63.6	0.9	52.0	0.9			52.4	0.7		A-1 Mar	63.9	1.0	99.9	1.4	49.3	0.7
Hardwood types:																
Growing stock:																
Softwood Hardwood	133.5 428.7	1.7 5.8	442.0 295.8	5.3 4.1			94.0 99.3	1. 2 1. 3	204.1 304.3	2.6 4.2	191.5 594.8	2.3 7.8	84.3 498.5	1.1 6.9	74.2 394.8	0.9 5.3
Total	562.2	7.5	737.8	9.4			193.3	2.5	508.4	6.8	786.3	10.1	582.8	8.0	469.0	6.2
Cull timber:																
Softwood Hardwood	17.5 162.5	0, 2 2, 2	125.9 174.0	1.5 2.4			7.3 164.9	0. 1 2. 3	48.3 144.8	0.6 2.0	14.0 202.6	0.2 2.7	3.1 128.7	( <u>3</u> /) 1.8	11.2 151.9	0.1 2.1
Tota1	180.0	2,4	299.9	3.9			172.2	2.4	193.1	2.6	216.6	2.9	131.8	1.8	163.1	2.2
All types:																
Growing stock:																
Softwood Hardwood	263.5 196.3	3.6 2.7	493.3 89.0	6.7 1.2			197.8 57.5	2.7 0.8	416.6 90.8	5.7 1.3	262.7 208.0	3.6 2.7	231.9 289.3	3. 1 4. 0	208.1 215.9	2.9 2.9
Total	459.8	6.3	582.3	7.9			255.3	3.5	507.4	7.0	470.7	6.3	521.2	7. 1	424.0	5.8
Cull timber:																
Softwood Hardwood	11.8 75.4	0. 1 1. 0	42.7 49.9	0.5 0.7			11.5 102.5	0. 1 1. 4	13.3 40.0	0.2 0.6	7.9 71.9	0.1 1.0	4.3 76.5	0.1 1.1	10.6 83.3	0.1 1.2
Total	87. 2	1.1	92.6	1.2			114.0	1.5	53.3	0.8	79.8	1.1	80.8	1.2	93,9	1.3
All timber	547.0	7.4	674.9	9.1			369.3	5.0	560.7	7.8	550. 5	7.4	602.0	8.3	517.9	7.1

<sup>1/</sup> Includes volume of palm, 2/ Includes Bureau of Land Management, 3/ Less than 0.05 cord per acre.

Table 21d. --Average net volume per acre of growing stock and cull timber  $\frac{1}{2}$  on commercial forest land, by ownership, major forest type, and species group, Central Florida, 1959

Forest type, species group, and class of material		ll rships	Nati for	onal	Ind	ian	Oth Fede:			county, inicipal		rest	Fa	rm	Mis priv	
	Cubic feet	Cords	Cubic feet	Cords	Cubic	Cords	Cubic feet	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords
Pine types:																
Growing stock:																
Softwood Hardwood	105.7	1.5 ( <u>3</u> /)	303. 8	4.5			122.2	1.8	341.8	4.7	252, 8 17. 2	3, 2 0, 2	72.0 1.4	1.0 ( <u>3</u> /)	129.6	1.8
Total	106.7	1.5	303.8	4.5			122.2	1.8	341.8	4.7	270.0	3, 4	73.4	1.0	129.6	1.8
Cull timber:																
Softwood Hardwood	3, 2 11, 4	( <u>3</u> /) 0,2	13.7	0.2					 3.0	 ( <u>3</u> /)	28.7	0.4	2.5 5.8	( <u>3</u> /) 0.1	4.3 20.9	0.1 0.3
Total	14.6	0.2	13.7	0.2					3.0	(3/)	28.7	0.4	8. 3	0.1	25. 2	0.4
Oak-pine type:																
Growing stock:																
Softwood Hardwood	215. 1 20. 3	2.8 0.3	122.9	1.5					257.2	3, 2			296.4 24.5	4.0 0.4	128.6 21.8	1.6 0.3
Total	235, 4	3, 1	122.9	1.5					257.2	3. 2			320.9	4.4	150.4	1.9
Cull timber:																
Softwood Hardwood	3.9 91.6	( <u>3</u> /) 1.2						 	96.4	1.6			8.2 122.6	0.1 1.6	70. 4	1.0
Total	95.5	1.2							96.4	1.6			130.8	1.7	70.4	1.0
Hardwood types:																
Growing stock:																
Softwood Hardwood	213.7 210.2	2.7 2.8	71.7 75.1	0.9 1.2			21.2 53.1	0.3 0.7	275.5 156.6	3. 5 2. 0	848.5 206.0	10.1	207.2 186.2	2.6 2.5	182.6 245.7	2, 3 3, 3
Total	423.9	5.5	146.8	2.1	~~		74.3	1.0	432.1	5.5	1,054.5	13.0	393,4	5.1	428.3	5.6
Cull timber:																
Softwood Hardwood	13.3 379.5	0.2 5.1	232.1	3. 3			10.6 69.0	0.1	7.5 173.6	0.1 2.4	91.6 119.4	1. 1 1. 6	11.5 456.9	0.1 6.2	10.8 341.1	0.1 4.6
Total	392.8	5.3	232.1	3, 3		**	79.6	0.9	181.1	2.5	211.0	2.7	468.4	6.3	351.9	4.7
All types:																
Growing stock:																
Softwood Hardwood	152.8 88.2	2.0 1.2	180.5 33.4	2.6 0.5			98.2 12.6	1.5 0.2	309.5 66.2	4.1 0.9	632.4 137.5	7.6 1.9	126.5 70.3	1.6 0.9	154.3 115.2	2.0 1.6
Total	241.0	3. 2	213.9	3, 1			110.8	1.7	375.7	5.0	769.9	9.5	196.8	2,5	269.5	3, 6
Cull timber:																
Softwood Hardwood	7.4 165.9	0.1 2.2	6.1 103.2	0, 1 1, 5			2,5 16.4	( <u>3</u> /) 0, 2	3.2 79.8	( <u>3</u> /) 1, 1	58.3 86.5	0.7 1.2	6.0 175.3	0.1 2.4	7.2 171.5	0.1 2.3
Total	173.3	2. 3	109.3	1,6			18.9	0, 2	83.0	1.1	144.8	1.9	181.3	2.5	178.7	2.4
All timber	414.3	5, 5	323, 2	4.7			129.7	1.9	458.7	6. 1	914.7	11, 4	378.1	5.0	448.2	6.0

<sup>1/</sup> Includes volume of palm.
2/ Includes Bureau of Land Management.
3/ Less than 0.05 cord per acre.

Table 21e. --Average net volume per acre of growing stock and cull timber  $\frac{1}{2}$  on commercial forest land, by ownership, major forest type, and species group, South Florida, 1959

Forest type, species group, and class of material		A11 rships	Nati for		Ind	ian	Oth Fede	er ral <u>2</u> /		county, unicipal	Fore indus		Fa	ırm	Mis priv	
	Cubic	Cords	Cubic	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic	Cords	Cubic feet	Cords	Cubic	Cords
Pine types:																
Growing stock:																
Softwood Hardwood	89.7	1.3 ( <u>3</u> /)				~ -	( <u>4</u> /)	( <u>4</u> /)	38.2	0.5			78.5 0.7	1. 1 ( <u>3</u> /)	101.4	1.4
Total	90.0	1.3					( <u>4</u> /)	( <u>4</u> /)	38. 2	0.5			79.2	1.1	101.4	1.4
Cull timber:																
Softwood Hardwood	1.1 18.4	( <u>3</u> /) 0.3											1.2 8.3	( <u>3</u> /) 0. 1	1.2 27.4	( <u>3</u> /) 0, 4
Total	19.5	0.3										~-	9.5	0.1	28.6	0.4
Oak-pine type:																
Growing stock:																
Softwood Hardwood	255.8 2.4	3.3 ( <u>3</u> /)									~ =		562.0 9.4	6. 7 0. 2	149.6	2, 1
Total	258.2	3. 3					~ ~						571.4	6. 9	149.6	2, 1
Cull timber:																
Softwood Hardwood	14.5 270.3	0.2 3.7								***			56.2 243.5	0. 7 3. 2	279.6	3, 9
Total	284.8	3.9				40 CB							299.7	3, 9	279.6	3, 9
Hardwood types:																
Growing stock:																
Softwood Hardwood	363.8 26.7	4.5 0.4			121.7	1.7			28.9	0.3			277.0 17.5	3. 4 0. 2	404.6 30.8	5. 0 0. 4
Total	390.5	4.9	- **		121.7	1.7			28.9	0.3			294.5	3. 6	435.4	5. 4
Cull timber:																
Softwood	62.5	0.8			164.0	2.1	~					a e	13.7	0.2	73.1	0.9
Hardwood	307.5	4.2			79.4	1.0	(4/)	(4/)	115.6	1.4			364.5	4. 9	305.6	4.2
Total	370.0	5.0			243.4	3. 1	(4/)	( <u>4</u> /)	115.6	1.4			378, 2	5. 1	378. 7	5. 1
All types:																
Growing stock:																
Softwood Hardwood	192.2	2.5 0.1			121.7	1.7	(4/)	( <u>4</u> /) 	36.9	0.5			134. 0 4. 8	1.8	233.0 13.2	3. 0 0. 2
Total	202.0	2.6			121.7	1.7	(4/)	(4/)	36.9	0.5			138.8	1.9	246.2	3, 2
Cull timber:																
Softwood Hardwood	23.6 128.2	0.3 1.8			164.0 79.4	2.1 1.0	 ( <u>4</u> /)	( <u>4</u> /)	115.6	1.4			5.2 96.0	0.1 1.3	32.1 153.5	0.4 2.1
Total	151.8	2.1			243.4	3. 1	(4/)	( <u>4</u> /)	115.6	1.4			101.2	1.4	185.6	2. 5
All timber	353.8	4.7			365, 1	4.8	(4/)	(4/)	152, 5	1, 9			240, 0	3, 3	431, 8	5. 7

<sup>1/</sup> Includes volume of palm.
2/ Includes Bureau of Land Management.
3/ Less than 0.05 cord per acre.
4/ Excluded because of excessive sampling error.

Table 22.--Average net volume per acre of growing stock on commercial forest land, by stand size, major forest type, stocking, and site quality, Florida, 1959

#### PINE TYPES

G14 - 124					Stand	size				
Site quality and stocking	All stan	d sizes	Sawtii	mber	Poleti	imber		lling apling	Nonst and o	
	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords
Good site:										
Well stocked	793.0	11.1	1,320.3	18.1	506.6	7.7	45.4	0.6		
Medium stocked	381.0	5.3	886.5	12.0	279.3	4.2	51.4	0.7	150.1	1.9
Poorly stocked	94.2	1. 3	549.9	7.2	191.6	2. 9	34.5	0.5	32.0	0.4
Tota1	434.9	6.1	1,131.3	15.4	366.6	5.6	42.8	0.6	34.9	0.5
Fair site:										
Well stocked	470.4	6.7	990.6	13.5	465.9	7.0	53.1	0.7		
Medium stocked	264.1	3.7	634.0	8.5	261.1	3.9	45.0	0.6	196.0	2.6
Poorly stocked	51.4	0.7	538.4	7. 2	143.7	2.1	27.2	0.4	22.9	0.3
Total	168.2	2.4	785.4	10.6	298.2	4.5	37.6	0.5	25.6	0.3
Poor site:										
Well stocked	306.5	4.5	812.0	11.4	348.0	5.4	41.4	0.5		
Medium stocked	242.0	3.4	606.1	7.8	263.6	4.0	58.3	0.8	266.2	3.4
Poorly stocked	23.0	0.3			146.4	2.2	11.5	0.1	10.2	0.1
Total	80.0	1.2	722.3	9.8	247.7	3.8	30.0	0.4	11. 3	0.2
All sites:										
Well stocked	657.0	9.3	1,243.6	17.0	471.9	7.1	47.1	0.6		
Medium stocked	331.0	4.6	802.8	10.8	271.8	4.1	50.2	0.7	187.3	2.4
Poorly stocked	54.5	0.8	546.1	7. 2	162.1	2.5	27.7	0.4	19.8	0.3
Total	264.5	3.7	1,039.8	14.2	325.4	4.9	38.9	0.5	21.9	0.3
				OAK-PII	VE TYPES					
Good site:										
Well stocked	1,004.5	13. 4	1,432.3	18.9	440.9	6.4	106. 4	1.4		
Medium stocked	469.6	6.4	849.4	11.5	276.0	4.0	73.2	1.0	218.3	2.7
Poorly stocked	237.7	3, 2	631.4	8.2	234.8	3.5	93.1	1.2	111.5	1.4
Tota1	669.2	9.0	1,185.4	15.7	351.0	5.1	88.9	1.2	122.8	1.5
Fair site:										
Well stocked	681.2	9.2	1,055.6	14.0	273.5	4.2	110.3	1. 2		
Medium stocked	317.0	4.3	789.9	10.4	116.5	1.8	129.0	1. 7		
Poorly stocked	127.6	1.7	341.8	4.5	221.0	3.1	62.9	0.8	88.3	1.1
Tota1	270.5	3. 7	882.5	11.7	204.7	3.0	89.0	1.2	88. 3	1.1
Poor site:										
Well stocked	359.9	5.1			359.9	5.1				
Medium stocked										
Poorly stocked	122.7	1.7			194.7	2.8	44.9	0.6	122.8	1.7
Total	131.9	1.8			224. 4	3. 2	39.0	0.5	122.8	1.7
All sites:										
Well stocked	942.0	12.6	1,375.4	18.2	407.0	6.0	107.1	1.4		
Medium stocked	411.9	5.6	834.0	11.2	222.1	3.2	95.8	1.3	218.3	2.7
Poorly stocked	162.6	2.2	587.2	7.6	218.4	3.1	68.7	0.9	105.7	1.4
Total	488. 9	6.6	1,129.3	16.0	283.5	4. 1	84.3	1. 1	109.8	1.4

Table 22. -- Average net volume per acre of growing stock on commercial forest land, by stand size, major forest type, stocking, and site quality, Florida, 1959 (continued)

#### HARDWOOD TYPES

C:+1:+					Stand	size				
Site quality and stocking	All stand	d sizes	Sawtin	nber	Poleti	imber	Seed and sa	0		tocked other
	Cubic feet	Cords	Cubic	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cord
Good site:										
Well stocked	1,807.7	23.3	2,113.6	26.8	872.1	12.6	40.3	0.5	~-	
Medium stocked Poorly stocked	1,396.7 675.7	17.9 8.5	1,642.7 970.2	20.9 12.1	573.2 244.2	8.1 3.4	77.9 129.5	1.0 1.6	631. 1 161. 1	7.0
Total	1,479.1	19.0	1,792.7	22.8	723.0	10.4	85.3	1.0	175. 1	2.1
Fair site:										
Well stocked	879.3	11.6	1,462.2	18.8	527.8	7.5	112.4	1.6	~ =	
Medium stocked	656.1	8.7	1,113.3	14.5	478.5	6.8	131.6	1.7	371.2	5.0
Poorly stocked	132.8	1.7	770.4	9.9	278.5	3.9	67.4	0.9	35.2	0.5
Total	445.0	5.9	1,211.9	15.7	449.0	6.4	92.0	1.2	36.7	0.5
Poor site:										
Well stocked	281.4	3.8	1,199.2	14.4	366.0	5. 1	7.1	0.1		~
Medium stocked	69.6	1.0	353.3	4.0	348.8	4.9	20.1 7.1	0.3	 C 1	0.1
Poorly stocked Total	25.3	0.2	782. 7	9.3	157.7 260.3	3. 7	10.0	0.1	6.1	0.1
All sites:										
Well stocked Medium stocked	1,197.0 818.6	15.6 10.7	1,799.7 1,336.0	23.0 17.2	589.3 488.2	8.4 6.9	91.8 107.0	1.3 1.4	419.8	5.4
Poorly stocked	116.8	1.5	855.4	10.8	258.5	3.6	54.3	0.7	22.4	0.3
Total	526.6	6.9	1,485.5	19.0	475.9	6.8	73.9	1.0	23.4	0.3
				ALL'	TYPES					
Good site:										
Well stocked	1,083.1	14.6	1,626.4	21.4	564.2	8.4	50.2	0.7		PO 40
Medium stocked	620.5	8.3	1,210.4	15.8	313.3	4.6	54.7	0.7	189.0	2.3
Poorly stocked	176.1	2. 3	782.9	9.9	198.6	3.0	42.6	0.6	42.1	0.6
Total	675.9	9. 1	1,407.1	18.4	413.7	6.2	48.6	0.7	46.2	0.6
Fair site:										
Well stocked	727.5	9.8	1,336.4	17.4	499.5	7.3	80.6	1.1		-~
Medium stocked Poorly stocked	506.5 94.2	6.8 1.3	993.9 711.3	13.0 9.2	390.4 214.3	5.6 3.1	93.3 49.4	1.2 0.7	231.3	3.1
Total	322.9	4.3	1,103.1	14.4	379.9	5.5	66.7	0.9	31.8	0.4
Poor site:										
	302.2	4 4	844.2	11.6	352.2	5.3	34.5	0.4		
Well stocked Medium stocked	197.3	4. 4 2. 8	606.1	7.8	272.4	5. 3 4. 1	41.1	0.4	266.2	3.4
Poorly stocked	19.8	0.3	353.3	4.0	153.1	2.3	11.1	0.1	9.4	0.1
Total	57.3	0.8	727.8	9.8	249.2	3. 7	22.3	0.3	9.9	0.1
All sites:										
Well stocked	886.5	12.0	1,519.0	20.0	511.7	7.6	60.7	0.8		
Medium stocked	535.9	7.2	1,100.8	14.4	350.0	5.1	70.4	0.9	217.9	2.8
Poorly stocked	84.1	11.2	747. 1	9.5	197.4	2.9	39.9	0.5	22.2	0.3
Total	382.1	5.1	1,279.9	16.8	376.4	5.5	52.8	0.7	24.0	0.3

Table 23. -- Net annual growth, mortality, and cut of sawtimber and growing stock on commercial forest land, by ownership and species group, Florida, 1958

				rship and species	group, riorio	7 1330			
Growth, mortality, and cut, by species group	All ownerships	National forest	Indian	Bureau of Land Management	Other Federal	State, county, and municipal	Forest industry	Farm	Misc. private
			SA	WTIMBER (In mil	llion board fe	et)			
Net annual growth:									
Pine	929.2	78.1		~ •	23. 2	32.5	307.6	166.3	321.5
Cypress	165.4	3.5	2.5		1.1	2.8	45.0	58. 1	52.4
Hardwood	223.1	2.7			1.3	1.3	67.4	60.9	89.5
Total	1,317.7	84.3	2.5		25.6	36.6	420.0	285.3	463.4
Annual mortality:									
Pine	395.0	32.5			10.3	14.0	131.4	70.4	136. 4
Cypress	81.6	1.7	1.2		0.6	1.4	22.2	28.6	25. 9
Hardwood	247.5	3.1			1.3	1.4	74.6	67.8	99.3
Tota1	724. 1	37.3	1.2		12.2	16.8	228.2	166.8	261.6
Annual cut:									
Pine	611.5	34.8		~~	8.6	7.9	211.6	178.6	170.0
Cypress	30.5	19.6					1.1	8.7	1. 1
Hardwood	91.6	0.6			~ ~		26.2	41.1	23. 7
Total	733.6	55.0			8.6	7.9	238.9	228. 4	194.8
			GRO	WING STOCK (In t	million cubic	feet)			
Net annual growth:									
Pine	211.8	18.0			5.3	8.9	69.3	42. 1	68.2
Cypress	35.4	1.0	0.1		0.3	0.5	9.9	9.9	13. 7
Hardwood	64.6	1.5			0.7	0.6	18.2	19.0	24. 6
Total	311.8	20.5	0.1		6.3	10.0	97.4	71.0	106.5
Annual mortality:									
Pine	90.1	7.7			2.1	3.7	29.6	17.9	29.1
Cypress	17.4	0.4			0.2	0.2	4.9	4.9	6.8
Hardwood	71.6	1.6			0.7	0.7	20.1	21.1	27.4
Total	179.1	9.7	~-		3.0	4.6	54.6	43.9	63.3
Annual cut:									
Pine	159.5	11.0			2.2	2.6	51,2	44.3	48.2
Cypress	7.1	4.1					0.2	2.5	0.3
Hardwood	22.7	0.2		* ·		0.1	5.6	10.9	5.9
'Total	189.3	15.3			2.2	2.7	57.0	57.7	54.4
			GRO	OWING STOCK (In	thousand cor	ds)			
Net annual growth:									
Pine	3,041	252			79	128	1,001	611	970
Cypress	454	12	1		4	7	122	128	180
Hardwood	889	22			11	9	240	268	339
Total	4,384	286	1		94	144	1,363	1,007	1,489
Annual mortality:									
Pine	1,293	109			34	53	425	260	412
Cypress	223	6			2	3	60	63	89
Hardwood	987	24			12	10	267	298	376
Total	2,503	139			48	66	752	621	877
Annual cut:	0.445								
Pine	2,198	152			31	35	705	611	664
Cypress Hardwood	78 277	45 2				1	2 69	28 133	3 72
Total	2,553	199			31	36	776	772	739
IUIAI	2,333	199			31	30	110	112	139

Table 24. --Annual mortality of sawtimber and growing stock on commercial forest land, by species group and cause of death, Florida, 1958

			Cause of	f death		
Species group	All causes	Fire	Insects	Diseases	Other	Unknown
		SAWTIMB	ER (In million boa	rd feet)		
Pine	395.0	-~	102, 3	19, 7	130.4	142, 6
Cypress	81, 6	49.0			15.7	16.9
Hardwood	247.5				99.2	148.3
Total	724.1	49.0	102.3	19. 7	245.3	307.8
	,	GROWING S	TOCK (In million	cubic feet)		
Pine	90.1		21.9	4. 9	28.4	34.9
Cypress	17.4	10.6		~-	2.6	4.2
Hardwood	71.6	2.9	3, 6	2, 1	19.3	43.7
Total	179.1	13.5	25.5	7. 0	50.3	82.8
		GROWING	STOCK (In thousa	nd cords)		
Pine	1, 293		314	70	407	502
Cypress	223	136		th co	33	54
Hardwood	987	39	49	30	267	602
Total	2, 503	175	363	100	707	1, 158

Table 25a. --Average annual net growth per acre of sawtimber on commercial forest land, by ownership, major forest type, and species group, for the entire State of Florida, 1958

### (In board feet)

Type and species group	A11 ownerships	National forest	Indian	Other Federal 1/	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:								
Softwood Hardwood	73 ( <u>2</u> /)	95 ( <u>2</u> /)		91 	75 	95 1	42 ( <u>2</u> /)	76 ( <u>2</u> /)
Total	73	95		91	75	96	42	76
Oak-pine type:								
Softwood Hardwood	95 9	116		19 3	28	123 9	122 11	<b>66</b> 9
Total	104	116		22	28	132	133	75
Hardwood types:								
Softwood Hardwood	29 27	23 10	137	6 3	28 9	43 40	32 26	21 25
Total	56	33	137	9	37	83	58	46
All types:								
Softwood Hardwood	56 11	79 3	137	41 2	61 2	78 15	42 11	50 12
Total	67	82	137	43	63	93	53	62

<sup>1/</sup> Includes Bureau of Land Management. 2/ Less than 0.5 board foot per acre.

Table 25b. --Average annual net growth per acre of sawtimber on commercial forest land, by ownership, major forest type, and species group, Northeast Florida, 1958

### (In board feet)

Type and species group	All ownerships	National forest	Indian	Other Federal 1/	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:		*						
Softwood	97	97	**		45	116	80	90
Hardwood	(2/)					1	( <u>2</u> /)	( <u>2</u> /)
Total	97	97		gip em	45	117	80	90
Oak-pine type:								
Softwood	116	78				130	130	88
Hardwood	14					9	18	19
Total	130	78				139	148	107
Hardwood types:								
Softwood	29	35			3	45	22	22
Hardwood	33	13			13	37	35	30
Total	62	48			16	82	57	52
All types:								
Softwood	71	86		~-	37	92	57	59
Hardwood	14	2			2	15	19	15
Total	85	88			39	107	76	74

<sup>1/</sup> Includes Bureau of Land Management, 2/ Less than 0.5 board foot per acre.

Table 25c. --Average annual net growth per acre of sawtimber on commercial forest land, by ownership, major forest type, and species group, Northwest Florida, 1958

# (In board feet)

Type and species group	All ownerships	National forest	Indian	Other Federal 1	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:				,				
Softwood	100	85		114	168	70	110	139
Hardwood	( <u>2</u> /)	( <u>2</u> /)	A 400			( <u>2</u> /)	2	( <u>2</u> /)
Total	100	85		114	168	70	112	139
Oak-pine type:								
Softwood	84	163		19	30	111	114	69
Hardwood	5			3		9	8	2
'Total	89	163		22	30	120	122	71
Hardwood types:								
Softwood	19	19		7	29	33	22	11
Hardwood	32	11		3	8	42	46	30
Total	51	30		10	37	75	68	41
All types:								
Softwood	65	70		44	118	60	65	68
Hardwood	14	3		2	2	15	25	16
Total	79	73		46	120	75	90	84

<sup>1/</sup> Includes Bureau of Land Management, 2/ Less than 0.5 board foot per acre.

Table 25d. --Average annual net growth per acre of sawtimber on commercial forest land, by ownership, major forest type, and species group, Central Florida, 1958

(In board feet)

Type and species group	All ownerships	National forest	Indian	Other F'ederal <u>1</u> /	State, county, and municipal	Forest industry	Farm	Misc. private
Pine types:								
Softwood Hardwood	28 ( <u>2</u> /)	202		41	48	40 ( <u>2</u> /)	17 ( <u>2</u> /)	36 
Total	28	202		41	48	40	17	36
Oak-pine type:								
Softwood Hardwood	75 ( <u>2</u> /)	8			22		128 1	30 ( <u>2</u> /)
Total	75	8	10 10		22		129	30
Hardwood types:								
Softwood	34	13		1	48	111	38	25
Hardwood	18	2		3	9	49	11	24
Total	52	15		4	57	160	49	49
All types:								
Softwood	31	96		31	47	86	27	31
Hardwood	8	1		1	3	31	4	11
Total	39	97		32	50	117	31	42

Table 25e. --Average annual net growth per acre of sawtimber on commercial forest land, by ownership, major forest type, and species group, South Florida, 1958

(In board feet) State, county, and municipal Type and All National Other Misc. Forest Indian Farm Federal 1/ species group ownerships forest industry Pine types: Softwood Hardwood 29 52 8 15 40 29 52 Total 15 40 Oak-pine type: Softwood 25 69 10 Hardwood Total 25 69 10 Hardwood types: Softwood 42 137 79 31 3 Hardwood Total 45 137 80 35 All types: Softwood 33 137 42 6 31 36  ${\tt Hardwood}$ (2/) Total 34 137 42 6 - ~ 31 38

<sup>1/</sup> Includes Bureau of Land Management. 2/ Less than 0.5 board foot per acre

<sup>1/</sup> Includes Bureau of Land Management.

<sup>2/</sup> Less than 0.5 board foot per acre.

Table 26a. --Average annual net growth per acre of growing stock on commercial forest land, by ownership, major forest type, and species group, for the entire State of Florida, 1958

Type and species group		All rships	Nati for	onal	Ind	lian	Oth Fede	er ral <u>1</u> /	State, and mu	county, inicipal		rest	F	arm	Mis priv	
	Cubic feet	Cords	Cubic	Cords	Cubic	Cords	Cubic feet	Cords	Cubic	Cords	Cubic feet	Cords	<u>Cubic</u> <u>feet</u>	Cords	Cubic	Cords
Pine types:																
Softwood Hardwood	17.1 0.2	0, 3 ( <u>2</u> /)	22. 9 ( <u>2</u> /)	0.3 ( <u>2</u> /)			18.4 0.1	0.3 ( <u>2</u> /)	20.0 ( <u>2</u> /)	0.3 ( <u>2</u> /)	22.6 0.2	0.3 ( <u>2</u> /)	11. 4 0. 1	0. 1 ( <u>2</u> /)	16.0 0.2	0. 2 ( <u>2</u> /)
Total	17. 3	0. 3	22. 9	0.3			18.5	0.3	20.0	0.3	22. 8	0.3	11.5	0.1	16.2	0. 2
Oak-pine type:																
Softwood Hardwood	19.6 3.5	0.3 ( <u>2</u> /)	8. 1 1. 4	0, 1 ( <u>2</u> /)			7.9 3.7	0.1 ( <u>2</u> /)	12.1 1.6	0.1 ( <u>2</u> /)	27.5 3.5	0. 4 ( <u>2</u> /)	21.4 3.8	0.3 ( <u>2</u> /)	16.7 3.7	0. 2 ( <u>2</u> /)
Total	23. 1	0. 3	9.5	0.1	-		11.6	0.1	13. 7	0.1	31.0	0.4	25. 2	0.3	20.4	0. 2
Hardwood types:																
Softwood Hardwood	5.8 7.4	0. 1 0. 1	6.4 5.5	0. 1 0. 1	4.7	0. 1	2.2 1.4	( <u>2</u> /) ( <u>2</u> /)	5.8 3.7	0.1 ( <u>2</u> /)	7.7 10.5	0. 1 0. 1	5.9 8.0	0. 1 0. 1	5, 2 6, 5	0. 1 0. 1
Total	13.2	0.2	11.9	0.2	4.7	0.1	3. 6	(2/)	9.5	0.1	18.2	0. 2	13.9	0.2	11.7	0. 2
All types:																
Softwood Hardwood	12. 6 3. 3	0. 2 ( <u>2</u> /)	18. 4 1. 4	0. 3 ( <u>2</u> /)	4.7	0. 1	9.3 1.2	0. 1 ( <u>2</u> /)	16. 0 1. 0	0. 2 ( <u>2</u> /)	17.5 4.0	0.3 ( <u>2</u> /)	9.7 3.6	0.1 ( <u>2</u> /)	10.9 3.3	0.1 ( <u>2</u> /)
Total	15.9	0. 2	19.8	0.3	4.7	0. 1	10.5	0. 1	17. 0	0.2	21.5	0.3	13. 3	0.1	14.2	0. 1

<sup>1/</sup> Includes Bureau of Land Management. 2/ Less than 0.05 cord per acre.

Table 26b. --Average annual net growth per acre of growing stock on commercial forest land, by ownership, major forest type, and species group, Northeast Florida, 1958

							Jup, 1101									
Type and species group	i	All rships		onal rest	Ind	lian	Oth Fede	er ral 1/		county, inicipal	For indu		F	arm		isc. vate
	Cubic	Cords	Cubic	Cords	Cubic feet	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords	Cubic feet	Cords
Pine types:																
Softwood Hardwood	23.4 0.2	0. 3 ( <u>2</u> /)	22, 3	0.3					14.8	0.2	26, 3 0. 2	0.3 ( <u>2</u> /)	20.8	0.3 ( <u>2</u> /)	22.4	0.3 ( <u>2</u> /)
Total	23.6	0.3	22. 3	0.3					14.8	0. 2	26.5	0.3	21.0	0.3	22.6	0.3
Oak-pine type:																
Softwood Hardwood	25.4 4.2	0, 3 ( <u>2</u> /)	16.9	0.2							29.4 3.4	0. 4 ( <u>2/</u> )	24.0 3.3	0. 3 ( <u>2</u> /)	23. 1 6. 1	0.3 0.1
Total	29.6	0.3	16.9	0, 2							32.8	0. 4	27, 3	0. 3	29.2	0.4
Hardwood types:																
Softwood Hardwood	6.5 9.3	0. 1 0. 1	10.0 7.1	0. 1 0. 1					0.8 2.6	( <u>2</u> /) ( <u>2</u> /)	9.0 10.5	0. 1 0. 1	5.9 10.0	0. 1 0. 1	5. 0 8. 4	0.1 0.1
Total	15.8	0.2	17.1	0.2					3, 4	(2/)	19.5	0.2	15.9	0.2	13.4	0.2
All types:																
Softwood Hardwood	16.7 4.1	0, 2 ( <u>2</u> /)	20.1 1.2	0, 3 ( <u>2</u> /)			 		12.0 0.5	0.1 ( <u>2</u> /)	20.3 4.1	0.3 ( <u>2</u> /)	13.9 5.3	0, 2 ( <u>2</u> /)	14.6 4.2	0,2 ( <u>2</u> /)
Total	20.8	0.2	21.3	0. 3					12.5	0. 1	24. 4	0.3	19.2	0, 2	18.8	0.2

<sup>1/</sup> Includes Bureau of Land Management. 2/ Less than 0.05 cord per acre.

Table 26c. --Average annual net growth per acre of growing stock on commercial forest land, by ownership, major forest type, and species group, Northwest Florida, 1958

Type and species group		111 rships	Nati for		Ind	lian	Oth Fede	er ral <u>1</u> /		county, inicipal		rest istry	Fa	rm		sc. vate
	Cubic feet	Cords	Cubic	Cords	Cubic feet	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords	Cubic	Cords
Pine types:																
Softwood Hardwood	23. 0 0. 3	0, 3 ( <u>2</u> /)	24.0 0.1	0.3 ( <u>2</u> /)			23. 4 0. 2	0.3 ( <u>2</u> /)	39.6 0.2	0.6 ( <u>2</u> /)	18.3 0.3	0.3 ( <u>2</u> /)	26.7 0.6	0.4 ( <u>2</u> /)	24.9 0.4	0.3 ( <u>2</u> /)
Total	23.3	0.3	24.1	0.3			23.6	0.3	39.8	0.6	18.6	0. 3	27. 3	0.4	25.3	0.3
Oak-pine type:																
Softwood Hardwood	15.9 4.0	0. 2 ( <u>2</u> /)	7. 2 2. 3	0.1 ( <u>2</u> /)			7.9 3.7	0, 1 ( <u>2</u> /)	13.9 2.2	0, 2 ( <u>2</u> /)	24.2 3.8	0.3 ( <u>2</u> /)	18.9 6.6	0.3 0.1	14.3 2.4	0, 2 ( <u>2</u> /)
Total	19.9	0.2	9. 5	0.1			11.6	0, 1	16. 1	0.2	28.0	0. 3	25. 5	0.4	16.7	0.2
Hardwood types:																
Softwood Hardwood	3.8 9.3	0. 1 0. 1	5. 6 5. 2	0.1 0.1			2.4 1.5	( <u>2</u> /) ( <u>2</u> /)	8. 0 5. 6	0. 1 0. 1	4.7 10.9	0. 1 0. 1	4.5 14.0	0.1 0.2	2.5 8.6	( <u>2</u> /) 0. 1
Total	13.1	0, 2	10. 8	0.2			3. 9	(2/)	13.6	0.2	15.6	0. 2	18.5	0.3	11. 1	0.1
All types:					•											
Softwood Hardwood	14.3 4.4	0.2 ( <u>2</u> /)	18.2 1.6	0.3 ( <u>2</u> /)			10.1 1.4	0.1 ( <u>2</u> /)	28.7 1.8	0.4 ( <u>2</u> /)	14.1 4.0	0, 2 ( <u>2</u> /)	14.7 8.0	0.2 0.1	12.6 4.8	0.2 ( <u>2</u> /)
Total	18.7	0.2	19.8	0.3			11.5	0.1	30. 5	0.4	18. 1	0. 2	22.7	0.3	17.4	0.2

 $<sup>\</sup>underline{1}/$  Includes Bureau of Land Management.  $\underline{2}/$  Less than 0.05 cord per acre.

Table 26d. --Average annual net growth per acre of growing stock on commercial forest land, by ownership, major forest type, and species group, Central Florida, 1958

						Брестев	group, .									
Type and species group		ll rships	Nati for	onal est	Ind	ian	Oth Fede:	er ral <u>1</u> /		county, inicipal		rest istry	Fa	ırm		isc. vate
	Cubic	Cords	Cubic feet	Cords	Cubic	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic	Cords	Cubic feet	Cords
Pine types:																
Softwood Hardwood	6.9 ( <u>2</u> /)	0.1 ( <u>2</u> /)	17, 2	0.3			6.9	0.1	17.8	0.3	6.3 0.2	0, 1 ( <u>2</u> /)	5, 6 ( <u>2</u> /)	0.1 ( <u>2</u> /)	7. 9 	0.1
Total	6.9	0, 1	17.2	0.3			6.9	0.1	17.8	0.3	6.5	0.1	5.6	0.1	7. 9	0.1
Oak-pine type:																
Softwood Hardwood	10.9 0.8	0.1 ( <u>2</u> /)	1.0	( <u>2</u> /)					7.6	0.1			17.5 1.0	0, 3 ( <u>2</u> /)	5. 2 0. 7	0.1 ( <u>2</u> /)
Total	11.7	0.1	1.0	( <u>2</u> /)					7.6	0.1			18.5	0.3	5.9	0.1
Hardwood types:																
Softwood Hardwood	6.1 4.7	0.1 ( <u>2</u> /)	2. 1 3. 5	( <u>2</u> /) ( <u>2</u> /)			0.4 0.8	( <u>2</u> /) ( <u>2</u> /)	6. 9 3. 3	0, 1 ( <u>2</u> /)	19.5 5.6	0.2 0.1	6.2 4.2	0. 1 ( <u>2</u> /)	5. 2 5. 3	0.1 0.1
Total	10.8	0.1	5.6	( <u>2</u> /)			1.2	(2/)	10.2	0.1	25.1	0.3	10.4	0.1	10.5	0.2
All types:																
Softwood Hardwood	6.6 2.0	0. 1 ( <u>2</u> /)	8.7 1.6	0. 1 ( <u>2</u> /)			5.2 0.2	0, 1 ( <u>2</u> /)	12.6 1.4	0.2 ( <u>2</u> /)	14.7 3.7	0. 2 ( <u>2</u> /)	6. 1 1. 6	0.1 ( <u>2</u> /)	6.5 2.5	0, 1 ( <u>2</u> /)
Total	8.6	0.1	10.3	0.1			5.4	0.1	14.0	0.2	18.4	0, 2	7.7	0.1	9.0	0.1

<sup>1/</sup> Includes Bureau of Land Management. 2/ Less than 0.05 cord per acre.

Table 26e. --Average annual net growth per acre of growing stock on commercial forest land, by ownership, major forest type, and species group, South Florida, 1958

	Misc. private	Cords	0.1	0.1		0.1	0.1		0.1	0, 1		0, 1	(2/)	0.1	
	Pri	Cubic	5.4	5.4		10.4	10.4		10.0	11.0		7.5	0.4	7.9	
	Farm	Cords	$\frac{0.1}{(2/)}$	0.1		0.3	0.3		0.1	0, 1		0.1	( <u>2</u> /)	0.1	
	ĘĘ.	Cubic	6. 1 $(2/)$	6.1		26.0	26.6		9.1	9.6		7.2	0.1	7.3	
	Forest ndustry	Cords	1 1	1		1 1	:		1 1	+		i	-	:	
	Forest	Cubic	1 1	:			1		1 1	1		1	:	11	
3	county,	Cords	(2/)	(2/)		1 1	1		0.1	0.1		(2/)	;	(7)	
and specific group, some results and	State, county, and municipal	Cubic	1.5	1.5		1 1	:		4.2	4.2		1.9	;	1.9	
	er al 1/	Cords	0.3	0.3		11	;		1 1	;		0.3	1	0.3	
8+04F)	Other Federal 1/	Cubic	18.4	18.4		1 1	-		: :	:		18,4	1	18.4	
a shoot a	ian	Cords	1 1	1		1 1	1		0.1	0.1		0.1	1	0.1	
Garri	Indian	Cubic	1 1	1		: :	:		4.7	4.7		4.7	10	4.7	
	onal est	Cords	1 1	1		1 1	1		; ;	1		†	ŧ I	-	
	National forest	Cubic	1-1	1		1 1	1		1 1	1		;	:	+	
	A11 erships	Cords	0.1	0.1		0.2	0.2		0.1	0.1		0.1	(5/)	0.1	
	A11 ownerships	Cubic	5.4	5.4		14.4	14.5		9.6	10.5		7.1	0,3	7.4	
	Type and species group		Pine types: Softwood Hardwood	Total	Oak-pine type:	Softwood Hardwood	Total	Hardwood types:	Softwood Hardwood	Total	All types:	Softwood	Hardwood	Total	

Includes Bureau of Land Management.
 Less than 0.05 cord per acre.

Table 27. -- Average annual net growth per acre of growing stock on commercial forest land, by stand size, major forest type, stocking, and site quality, Florida, 1958

## PINE TYPES

					Stand	size				
Site quality and stocking	All stan	nd sizes	Sawti	mber	Poleti	imber		lling apling	Nonst and c	
	<u>Cubic</u> <u>feet</u>	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords
Good site:										
Well stocked	43.8	0.6	48.9	0.7	58.0	0.9	4.3	0.1		
Medium stocked Poorly stocked	23.5 5.8	0.4 0.1	32.8 16.3	0.4 0.2	32.7 19.8	0.5 0.3	4. 3 2. 0	0.1 (1/)	5. 1 1. 9	0.1 (1/)
Total	24.9	0.4	41.5	0.6	41.8	0.6	3. 3	0.1	2.0	(1/)
Fair site:										
	21.2	0.4	37.3	0.5	42.9	0.6	8.4	0. 1		
Well stocked Medium stocked	31.3 14.6	0.4 0.2	19.4	0.3	22.7	0.4	2.8	0.1	5.5	0.1
Poorly stocked	2.9	0.1	14.8	0.2	13.8	0.2	1.4	(1/)	0.8	(.1/)
Total	10.3	0.1	27.0	0.4	27.2	0.4	3. 3	0.1	0.9	(1/)
Poor site:										
Well stocked	18.7	0.2	21.0	0.3	25.5	0.4	7.9	0.1	~ ~	
Medium stocked	13.3	0.2	12.4	0.2	21.8	0.4	4.2	0.1	10.9	0.1
Poorly stocked	1.6	0.1	17.2	0.2	12.1	0.2	3.8	0.1	0.4	(1/)
Total	4.9	0.1	11.2	0.2	19. 5	0.3	3.0	0.1	0.4	(11)
All sites:										
Well stocked	37.8	0.6	45.8	0.6	48.9	0.7	6.3	0.1		
Medium stocked Poorly stocked	19.7 3.3	0.3 0.1	28.0 15.8	0.4 0.2	28.3 15.6	0.4 0.2	3.8 1.7	0.1 ( <u>1</u> /)	6.0 0.9	0.1 ( <u>1</u> /)
Total	17.3	0.3	37.4	0.5	33.5	0.5	3.5	0. 1	0.9	(1/)
				OAK-PI	NE TYPES					
Good site:										
	46.4	0.6	56.8	0.8	40.4	0.6	9. 1	0.1	40 ***	
Well stocked Medium stocked	46.4 21.9	0.8	34.5	0.8	19.8	0.3	5.3	0.1	5.0	0.1
Poorly stocked	10.6	0.1	19.3	0.2	21.7	0.3	4.2	0.1	3.9	0.1
Total	30.9	0.4	46.6	0.6	30.4	0.4	6.0	0.1	4.0	0.1
Fair site:										
Well stocked	29.5	0.4	33.5	0.5	34.9	0.6	3.3	0.1	der en	
Medium stocked	12.0	0.2	13.4	0.2	19.5	0.3	7.0	0.1		
Poorly stocked	11.2	0.1	22, 4	0.1	12.6	0.2	1.6 3.5	0.1	3. 1	0.1
Total	11.2	0.2	24,4	0.3	17.5	0.3	3. 3	0. 1	J. 1	0.1
Poor site:										
Well stocked	7.1	0.1			7.1	0.1				
Medium stocked Poorly stocked	5.5	0.1			7.6	0.1	5.5	0.1	4. 1	0.1
Total	5.4	0.1			7.5	0.1	4.8	0.1	4.1	0.1
All sites:										
Well stocked	43.0	0.6	53.3	0.7	37.6	0.6	8.1	0.1	er er	
Medium stocked	18.2	0.2	29.0	0.4	19.7	0.3	5.9	0.1	5.0	0.1
Poorly stocked	7.2	0.1	17.1	0.2	13.6	0.2	3.0	0.1	3. 7	0.1
Total	23.1	0.3	42.2	0.6	23.3	0.4	4.8	0.1	3.7	0.1

<sup>1</sup> Less than 0.05 cord per acre.

Table 27.--Average annual net growth per acre of growing stock on commercial forest land, by stand size, major forest type, stocking, and site quality, Florida, 1958 (continued)

### HARDWOOD TYPES

					Stand	size				
Site quality and stocking	All stan	d sizes	Sawti	mber	Poleti	imber	Seed and s	lling apling	Nonst and o	
	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords	Cubic feet	Cords
Good site:										
Well stocked Medium stocked Poorly stocked	47. 2 31. 3 12. 8	0.6 0.4 0.2	50.0 34.2 17.4	0.7 0.4 0.2	42.9 25.1 10.1	0.6 0.4 0.1	3.7 1.2 1.9	(1/) (1/) (1/)	6.5 4.3	0.1 0.1
Total	36.2	0.5	40.1	0.6	34.5	0.4	2.4	(1/)	4.4	0.1
Fair site:										
Well stocked Medium stocked Poorly stocked Total	29.0 20.2 3.8 14.0	0.4 0.3 0.1	36.6 27.2 16.6	0.5 0.4 0.2	29.0 21.3 11.2	0.4 0.3 0.2	5. 9 5. 1 2. 5	0.1 0.1 (1/)	8.8 0.8	0. 1 (1/)
Doon citor										
Poor site:  Well stocked  Medium stocked  Poorly stocked	15.9 4.2 0.6	0.2 (1/) (1/)	11.8  3.8	0.1	21.4 6.6 13.0	0.3 0.1 0.2	7.6 3.7 0.1	0.1 (1/) (1/)	0.2	  ( <u>1</u> /)
Total	1.4	(1/)	7.9	0.1	15.8	0.2	1.7	(1/)	0.2	(1/)
All sites:										
Well stocked Medium stocked Poorly stocked	35.2 22.3 3.0	0.5 0.3 0.1	43.5 30.1 16.7	0.6 0.4 0.2	31.4 21.5 11.4	0.4 0.3 0.2	5.9 4.7 1.9	0.1 0.1 ( <u>1</u> /)	8.4 0.6	0.1 ( <u>1</u> /)
Total	13.2	0.2	34.5	0.4	23.3	0.3	3.3	0.1	0.6	(1/)
				ALL	TYPES					
Good site:										
Well stocked Medium stocked Poorly stocked	45.0 25.1 7.0	0.6 0.4 0.1	50.1 33.6 17.1	0.7 0.4 0.2	54.0 30.9 19.2	0.8 0.5 0.3	4.7 4.3 2.1	0.1 0.1 (1/)	5. 1 2. 2	0. 1 ( <u>1</u> /)
Total	27. 8	0.4	41.5	0.6	39.9	0.6	3.5	0.1	2.2	(1/)
Fair site:										
Well stocked Medium stocked Poorly stocked	29.8 17.9 3.4	0.4 0.2 0.1	36.7 24.9 15.9	0.5 0.3 0.2	34.4 21.8 12.5	0.5 0.3 0.2	7. 2 4. 3 1. 9	0.1 0.1 ( <u>1</u> /)	6. 1 0. 9	0.1 ( <u>1</u> /)
Total	12.4	0.2	28.8	0.4	23.8	0.4	3.6	0.1	0.9	(1/)
Poor site:										
Well stocked Medium stocked Poorly stocked	18.0 10.9 1.2	0.2 0.2 (1/)	20. 2 12. 4 3. 8	0.3 0.2 0.1	24. 2 20. 3 11. 9	0.4 0.3 0.2	7.8 3.8 1.0	0.1 0.1 (1/)	10.9 0.4	0. 1 ( <u>1</u> /)
Total	3.4	0.1	16.4	0.2	18.0	0.2	3.0	0.1	0.4	(1/)
All sites:										
Well stocked Medium stocked Poorly stocked	37.1 20.7 3.3	0.5 0.3 0.1	45.3 29.3 16.5	0.6 0.4 0.2	42.0 25.4 14.1	0.6 0.4 0.2	6. 3 4. 2 1. 8	0.1 0.1 ( <u>1</u> /)	6. 2 0. 8	0.1 ( <u>1</u> /)
Total	15.9	0.2	36.2	0.5	29.3	0.4	3.5	0. 1	0.9	(1/)

<sup>1/</sup> Less than 0.05 cord per acre.

Table 28. --Output of timber products from roundwood and plant residues, by products and species group, Florida, 1958

by prod	by products and species group, Florida,	group, Florid	a, 1958	
Product and species group	Standard	Total	From plant residue	From
		Units	Units	Units
Saw logs:				
Softwood Hardwood	M bd. ft. 1/ M bd. ft. 1/	232, 091	1 1	232, 091 37, 847
Total	M bd. ft. 1/	269,938	1	269, 938
Veneer logs and bolts:				
Softwood Hardwood	M bd. ft. 1/ M bd. ft. 1/	654	1 1	654 43, 177
Total	M bd. ft. 1/	43,831	1	43, 831
Pulpwood:				
Softwood Hardwood	Std. cords $\frac{2}{2}$ /Std. cords $\frac{2}{2}$ /	1, 770, 047 64, 836	79, 287 3, 318	1, 690, 760 61, 518
Total	Std. cords 2/	1,834,883	82, 605	1, 752, 278
Fuelwood: $3/$				
Softwood Hardwood	Std. cords $\frac{2}{2}$ /Std. cords $\frac{2}{2}$ /	130, 526 156, 629	47, 224 42, 963	83, 302 113, 666
Total	Std. cords 2/	287, 155	90, 187	196, 968
Piling:				
Softwood Hardwood	M linear ft. M linear ft.	357	1 1	357
Tota1	M linear ft.	357	1	357
Poles:				
Softwood Hardwood	M pieces M pieces	315	1 1	315
Total	M pieces	315	1	315
Posts:				
Softwood Hardwood	M pieces M pieces	1,642	1 1	1,642
Tota1	M pieces	1,711	1	1, 711
Hewn ties:				
Softwood Hardwood	M pieces M pieces	79 76	: :	97 76
Total	M pieces	155	-	155
Other industrial wood: 4	: 4/			
Softwood Hardwood	M cu. ft. M cu. ft.	337 1,011	1 1	337 1, 011
Total	M cu. ft.	1, 348	:	1, 348
All products:				
Softwood Hardwood	M cu. ft. M cu. ft.	200, 200 30, 193	9, 375 3, 035	190, 825 27, 158
Total	M cu. ft.	230, 393	12, 410	217, 983
	,			

International 4-inch rule.
Rough wood basis.
Used for domestic heating and cooking, and excludes industrial use.
Includes excelsior bolts, turnery bolts, etc. 그 의 의 취

Table 29. --Output of timber products from roundwood, by source, product, and species group, Florida, 1958 (In thousand cubic feet)

					Material left	THOTE	TIOT 3
Product and species group	From all roundwood	Tota1	Sawtimber	Poletimber trees	following	dead	cull trees
Saw logs:							
Softwood Hardwood	42,635	40,469 6,783	39, 263 6, 783	1, 206	: :	230	1,936
Total	49, 587	47,252	46,046	1,206	ļ	230	2, 105
Veneer logs and bolts:							
Softwood Hardwood	98	97 6,418	97 6,418	: :	1 1		1 67
Total	6, 583	6,515	6,515	1	1	1	68
Pulpwood:							
Softwood Hardwood	134, 245	113, 558 3, 982	86,319	10, 753 2, 135	16, 486 474	86	20, 589
Total	139, 130	117,540	87,692	12, 888	16, 960	86	21, 492
Fuelwood:							
Softwood Hardwood	5, 431	262 527	: :	25	237	144	5,025 6,493
Total	12, 763	789	1	19	710	456	11, 518
Piling:							
Softwood	182	176	176	; ;	: :	: :	9 -
Total	182	176	176	1	:	;	9
Poles:							
Softwood Hardwood	6,075	5,893	5, 893	::	1 1	: :	182
Total	6,075	5, 893	5, 893	1	1	1	182
Posts:							
Softwood Hardwood	1,342	623	: :	496	127	1 1	719
Total	1, 376	653	1	526	127	;	723
Hewn ties:							
Softwood Hardwood	480 459	480	349 334	::	131	: :	1 1
Total	939	939	683	:	256	:	;
Other industrial wood: $1/$							
Softwood Hardwood	337	330	250 167	80 182	1 1	1 1	7
Total	1, 348	619	417	262	;	:	699
Ail products:							
Softwood Hardwood	190,825 27,158	161,888 18,548	132, 347 15, 075	12, 560 2, 401	16,981 1,072	472	28, 465 8, 298

 $\underline{1}$  Includes excelsior bolts, turnery bolts, etc.

Table 30. --Timber cut from sawtimber and growing stock, by product and species group, Florida, 1958

	Fro	m sawtim	ber	From	growing	stock
Product	Total	Soft- wood	Hard- wood	Total	Soft- wood	Hard- wood
	Thou	sand boar	d feet	Thous	and cubic	feet
Saw logs	237,541	200, 527	37,014	52,626	43,842	8,784
Veneer logs and bolts	43, 699	652	43,047	7,614	114	7,500
Pulpwood	405,974	399,555	6,419	118, 257	113,991	4,266
Fuelwood				794	261	533
Piling	1,034	1,034		179	179	
Poles	34, 308	34,308		5,980	5,980	~ <b>-</b>
Posts				692	662	30
Hewn ties	8, 202	4,191	4,011	2,417	1,235	1,182
Other industrial wood 1/	2,794	1,669	1,125	750	372	378
All products	733, 552	641,936	91,616	189,309	166,636	22,673

<sup>1/</sup> Includes excelsior bolts, turnery bolts, etc.

Table 32a. --Land area, by class and major forest type, for the entire State of Florida, 1934-1936, 1949, and 1959

(In	thousand	acres)
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Land class and forest type		Year of Surve	у	Change
Land class and forest type	1934-1936	1949	1959	1949-1959
Commercial forest land:				
Pine and oak-pine type Hardwood type	17, 124. 8 4, 734. 9	14,790.8 1/6,660.3	11,624.0 1/7,961.8	-3, 166.8 +1, 301.5
Total	21,859.7	21, 451.1	19, 585. 8	-1, 865.3
Noncommercial forest land	1,644.2	1,595.9	1,430.0	-165.9
Nonforest land:				
Cropland Improved pasture Idle or abandoned cropland Marsh or prairie Urban and other	2, 359.2 474.7 918.5 6, 789.4 727.3	3, 346.8 ( <u>3</u> /) 1, 121.9 5, 899.7 1, 063.2	2, 493.6 2, 383.1 1,047.3 5,287.7 1,786.0	$\frac{(2)}{(2/)}$ -74.6 -612.0 +722.8
Total	11,269.1	11, 431.6	12,997.7	+1,566.1
All land 4/	34,773.0	34, 478. 6	34,013.5	-465.1

Table 31. --Disposition of timber cut from growing stock, Florida, 1958

Disposition	Softw	700d	Hardy	vood	Tota	al
	Thousand cu. ft.	Percent	Thousand cu. ft.	Percent	Thousand cu. ft.	Percent
Left in woods (logging residue)	4,631	2.8	4, 122	18.2	8, 753	4.6
Transported to mill	162,005	97.2	18,551	81.8	180,556	95.4
Used in manufacture	140, 434	84.3	8, 301	36.6	148, 735	78.6
Plant residue:	21, 571	12.9	10, 250	45.2	31,821	16.8
Used:	14,540	8.7	3,890	17.2	18, 430	9.7
Coarse 1/ Fine	9,375 5,165	5.6 3.1	3,035 855	13.4 3.8	12,410 6,020	6. 5 3. 2
Unused:	7,031	4.2	6,360	28.0	13, 391	7. 1
Coarse Fine	267 6,764	0.2 4.0	5,246 1,114	23.1 4.9	5,513 7,878	2.9 4.2
Total timber cut	166, 636	100.0	22,673	100.0	189,309	100.0

 $<sup>\</sup>underline{1}\!\!/$  Excludes coarse material used for industrial fuel which is generally available for use when markets develop.

Table 32b. --Land area, by class and major forest type, Northeast Florida, 1934, 1949, and 1959

#### (In thousand acres)

7 . 1 .1		Year of Surve	у	Change
Land class and forest type	1934	1949	1959	1949-1959
Commercial forest land:				
Pine and oak-pine type Hardwood type	5,755.3 1,776.8	4,894.0 1/2,707.7	1/2,881.2	-608.0 +173.5
Total	7,532.1	7, 601. 7	7, 167. 2	-434.5
Noncommercial forest land	96.8	92.0	73. 7	-18.3
Nonforest land:				
Cropland Improved pasture Idle or abandoned cropland Marsh or prairie Urban and other	950.8 48.1 443.9 487.2 172.7	869.5 ( <u>3</u> /) 415.7 290.7 256.0	667. 3 461. 6 397. 2 365. 4 413. 0	$(\underline{2}/)$ $(\underline{2}/)$ -18.5 +74.7 +157.0
Total	2, 102. 7	1,831.9	2,304.5	+472.6
All land 4/	9,731.6	9,525.6	9, 545. 4	+19.8

Includes palm type.
 Comparison not valid; pasture included with cropland in the 1949 Survey.
 Data not available; included with cropland.
 Excludes all water areas.

<sup>1/</sup> Includes palm type.
2/ Comparison not valid; pasture included with cropland in the 1949 Survey.
3/ Data not available; included with cropland.
4/ Excludes all water areas.

Table 32c.--Lane area, by class and major forest type, Northwest Florida, 1934, 1949, and 1959

(In thousand acres)

Land class and forest type		Year of Surve	у	Change
Daily Class and lorest type	1934	1949	1959	1949-1959
Commercial forest land:				
Pine and oak-pine type Hardwood type	4,631.1 1,386.4	1/ 1,692.5	3,268.2 1/2,453.8	-967.3 +761.3
Total	6,017.5	5, 928. 0	5,722.0	-206.0
Noncommercial forest land	17.7	132.1	21, 1	-111.0
Nonforest land:				
Cropland Improved pasture Idle or abandoned cropland Marsh or prairie Urban and other	699.9 37.2 219.5 103.8 155.9	700.8 ( <u>3</u> /) 234.3 127.4 197.3	623.9 188.0 220.9 105.8 315.4	(2/) $(2/)$ $-13.4$ $-21.6$ $+118.1$
Total	1,216.3	1, 259.8	1,454.0	+194.2
A11 land <u>4</u> /	7, 251. 5	7, 319.9	7, 197. 1	-122, 8

Includes palm type. Comparison not valid; pasture included with cropland in the 1949 Survey. Data not available; included with cropland.

Excludes all water areas.

Table 32e. --Land area, by class and major forest type, South Florida, 1936, 1949, and 1959

(In thousand acres)

Land class and forest type	Ye	ar of Survey		Change
Edita class and forest type	1936	1949	1959	1949-1959
Commercial forest land:				
Pine and oak-pine type Hardwood type	1,580.7 587.1	1,755.5 <u>1</u> /418.7	1,207.1 1/664.4	-548. 4 +245. 7
Total	2, 167. 8	2, 174. 2	1,871.5	-302.7
Noncommercial forest land	1, 352. 0	1, 139.8	1,204.5	+64.7
Nonforest land:		,	,	
Cropland Improved pasture Idle or abandoned cropland Marsh or prairie Urban and other	146. 2 91. 8 65. 5 3, 857. 6 118. 6	640.4 ( <u>3</u> /) 237.5 3,419.6 242.6	275. 3 504. 3 187. 5 3, 154. 9 421. 1	(2/) (2/) -50.0 -264.7 +178.5
Total	4,279.7	4,540.1	4, 543, 1	+3.0
All land <u>4</u> /	7,799.5	7, 854.1	7,619.1	-235.0

I/ Includes palm type.
 2/ Comparison not valid; pasture included with cropland in the 1949 Survey.
 3/ Data not available; included with cropland.
 4/ Excludes all water areas.

Table 32d. --Lane area, by class and major forest type, Central Florida, 1936, 1949, and 1959

(In thousand acres)

		7		GI
Land class and forest type		lear of Surve	y	Change
	1936	1949	1959	1949-1959
Commercial forest land:				
Pine and oak-pine type	5, 157. 7	3, 905. 8	2,862.7	-1, 043.1
Hardwood type	984.6	1/1,841.4	$\frac{1}{1}$ , 962. 4	+121.0
Total	6, 142. 3	5, 747. 2	4,825.1	-922.1
Noncommercial forest land	177. 7	232.0	130, 7	-101.3
Nonforest land:				
Cropland	562.3	1, 136.1	927.1	(2/)
Improved pasture	297.6	(3/)	1,229.2	$(\overline{2}/)$
Idle or abandoned cropland	189.6	234.4	241.7	+7.3
Marsh or prairie	2,340.8	2,062.0	1,661.6	-400.4
Urban and other	280.1	367.3	636.5	+269.2
Total	3,670.4	3, 799. 8	4,696.1	+896.3
All land 4/	9,990.4	9,779.0	9,651.9	-127. 1

1/ Includes palm type.
 2/ Comparison not valid; pasture included with cropland in the 1949 Survey.
 3/ Data not available; included with cropland.
 4/ Excludes all water areas.

Table 33a.--Net volume  $^{1/}$  of growing stock and cull timber, by diameter class and species group, for the entire State of Florida, 1934-1936, 1949, and 1959

# (In million cubic feet) GROWING STOCK

				TOWING 5					
Species	Year	All			Diame	ter class (	inches)		
group	Year	classes	6	8	10	12	14	16-18	20+
Pine	1934-1936	3,222.0	177.5	572.0	711.6	637.6	457.8	426.7	238.8
	1949	3,349.6	283.6	669.0	941.2	711.1	404.0	265.2	75.5
	1959	3,169.7	326.5	710.9	790.8	662.2	355.7	264.9	58.7
Cypress	1934-1936	1,388.8	102.3	170.1	263.8	253.0	188.6	191.3	219.7
	1949	948.4	95.3	178.3	244.5	210.1	134.5	66.0	19.7
	1959	1,405.0	134.9	225.5	238.4	285.0	227.0	187.6	106.6
Hardwood	1934-1936	2,004.3	116.2	179.3	223.7	309.0	288.7	436.3	451.1
	1949	1,820.1	139.8	225.4	275.0	296.8	300.1	315.7	267.3
	1959	2,376.9	195. 1	304.1	365.7	298.9	329.4	448.6	435.1
			(	CULL TIME	BER2				
Pine	1934-1936	36.4	3.0	5.5	6.8	6.2	5.4	6.6	2.9
	1949	62.9	6.2	8.3	18.5	11.2	4.8	9.5	4.4
	1959	142.9	12.4	16.3	49.6	32.9	17.0	12.4	2.3
Cypress	1934-1936	117.9	28.3	26.5	20.2	15.4	8.3	8. 1	11.1
	1949	160.4	16.1	23.4	19.8	22.9	15.9	14.9	47.4
	1959	242.3	20.3	24.8	82.5	48.9	22.9	22.2	20.7
Hardwood	1934-1936	841.4	144.3	139.3	128.5	116.9	88.7	102.5	121.2
	1949	1,424.6	198.7	174.8	201.3	200.1	149.4	201.0	299.3
	1959	1,575.1	178.0	184. 4	236.1	272.1	208.9	264.6	231.0
				ALL TIMB	ER2/				
Pine	1934-1936	3,258.4	180.5	577.5	718.4	643.8	463.2	433.3	241.7
	1949	3,412.5	289.8	677.3	959.7	722.3	408.8	274.7	79.9
	1959	3,312.6	338.9	727.2	840.4	695.1	372.7	277.3	61.0
Cypress	1934-1936	1,506.7	130.6	196.6	284.0	268.4	196.9	199.4	230.8
	1949	1,108.8	111.4	201.7	264.3	233.0	150.4	.80.9	67.1
	1959	1,647.3	155.2	250.3	320.9	333.9	249.9	209.8	127.3
Hardwood	1934-1936	2,845.7	260.5	318.6	352.2	425.9	377.4	538.8	572.3
	1949	3,244.7	338.5	400.2	476.3	496.9	449.5	516.7	566.6
	1959	3,952.0	373.1	488.5	601.8	571.0	538.3	713.2	666.1

<sup>1/</sup> In order to provide a basis for valid comparisons, adjustments have been made to allow for differences in utilization standards from survey to survey. Thus, the volumes shown here will not agree with volumes previously published or current volumes appearing elsewhere in this report.

2/ Excludes volume of palm.

# Table 33b.--Net volume $^{\perp J}$ of growing stock and cull timber, by diameter class and species group, Northeast Florida, 1934, 1949, and 1959

### (In million cubic feet) GROWING STOCK

Species	******	All			Diame	eter class (	inches)		
group	Year	classes	6	8	10	12	14	16-18	20+
Pine	1934	1,582.2	89.6	305.6	359.2	319.3	218.2	182.6	107.7
	1949	1,687.1	121.2	320.8	482.2	382.5	228.7	129.8	21.9
	1959	1,505.5	166.7	323.9	388.7	328.0	163.9	112.6	21.7
Cypress	1934	687.2	42.1	78.3	130.1	135.3	99.1	99.4	102.9
	1949	475.1	41.8	85.6	130.9	119.8	65.6	24.2	7.2
	1959	576.2	47.8	88.7	107.9	149.4	94.5	60.8	27.1
Hardwood	1934	906.7	50.1	80.1	98.6	132.0	124.7	193.9	227.3
	1949	734.8	58.0	88.6	118.5	120.2	126.5	117.5	105.5
	1959	1,019.2	91.4	128.1	146.8	132.0	135.9	189.2	195.8
			(	CULL TIME	ER2				
Pine	1934	8.6	0.7	1.3	1.3	1. 4	1.6	1.9	0.4
	1949	29.6	3.4	4.5	6.8	4.1	2.4	5.1	3.3
	1959	57.9	3.3	5.7	17.9	15.6	7.7	7.0	0.7
Cypress	1934	25.3	2.0	5.1	5.3	5.0	3. 4	2.2	2.3
	1949	30.6	4.0	5.9	8.5	3.6	3.5	2.1	3.0
	1959	68. 1	3.9	4.7	31.0	9.4	7.9	4.5	6.7
Hardwood	1934	365.0	61.7	60.8	52.2	50.9	36.9	45.4	57.1
	1949	586.5	79.5	81.6	90.3	87.9	64.8	89.3	93.1
	1959	688.2	71.0	76.8	115.9	123.7	96.4	110.2	94.2
				ALL TIMB	ER2/				
Pine	1934	1,590.8	90.3	306.9	360.5	320.7	219.8	184.5	108. 1
	1949	1,716.7	124.6	325.3	489.0	386.6	231.1	134.9	25.2
	1959	1,563.4	170.0	329.6	406.6	343.6	171.6	119.6	22.4
Cypress	1934	712.5	44.1	83.4	135.4	140.3	102.5	101.6	105.2
	1949	505.7	45.8	91.5	139.4	123.4	69.1	26.3	10.2
	1959	644.3	51.7	93.4	138.9	158.8	102.4	65.3	33.8
Hardwood	1934	1,271.7	111.8	140.9	150.8	182.9	161.6	239.3	284.4
	1949	1,321.3	137.5	170.2	208.8	208.1	191.3	206.8	198.6
	1959	1,707.4	162.4	204.9	262.7	255.7	232.3	299.4	290.0

<sup>1/</sup> In order to provide a basis for valid comparisons, adjustments have been made to allow for differences in utilization standards from survey to survey. Thus, the volumes shown here will not agree with volumes previously published or current volumes appearing elsewhere in this report.

2/ Excludes volume of palm.

Table 33c. --Net volume  $\frac{1}{}'$  of growing stock and cull timber, by diameter class and species group, Northwest Florida, 1934, 1949, and 1959

### (In million cubic feet) GROWING STOCK

				ROWING ST	OCK				
Species	Year	All			Diame	eter class (i	nches)		
group	rear	classes	6	8	10	12	14	16-18	20+
Pine	1934	906. 1	51.5	149.7	180.8	173.8	133.4	136.4	80.5
	1949	1,084.5	125.6	223.8	282.6	203.0	115.6	92.8	41. 1
	1959	1,238.6	118.9	290.0	290.8	248.2	143.2	118.0	29.5
Cypress	1934	221.7	13.2	22.0	32.0	34. 3	34.5	37.7	48.0
	1949	84.3	5.9	13.1	15.3	12.7	12.3	18.8	6.2
	1959	215.4	16.1	29.0	27.6	32.4	35.7	46.0	28.6
Hardwood	1934	825.7	47.5	71.0	86.2	133.4	124.8	190.4	172.4
	1949	792.3	59.4	94.8	112.7	133.6	126.3	152.1	113.4
	1959	1,000.5	72.9	122.6	164.6	120.3	144.9	201.5	173. 7
			C	ULL TIMB	ER2/				
Pine	1934	9.3	0.7	1. 7	2.1	1.7	1.4	1.0	0.7
	1949	18.2	0.7	2.4	8.5	3.0	1.3	1.3	1.0
	1959	62.7	7.6	7.6	25.8	10.9	7. 8	3.0	
Cypress	1934	24.2	2.6	5.0	4.7	3.8	2.1	3.1	2.9
	1949	25.8	0.6	1.6	2.0	0.9	1.5	2.1	17. 1
	1959	58.5	3.0	8.3	11.0	8.0	8.4	10.3	9.5
Hardwood	1934	236.6	37.3	37.5	34.2	37.4	30.0	26.4	33.8
	1949	490.1	66.2	52.7	64.3	61.2	59.0	62.2	124.5
	1959	522.3	59.3	61.7	69.6	83.1	72.5	96.7	79.4
				ALL TIMBI	ER-2/				
Pine	1934	915.4	52.2	151.4	182.9	175.5	134.8	137.4	81.2
	1949	1,102.7	126.3	226.2	291.1	206.0	116.9	94.1	42.1
	1959	1,301.3	126.5	297.6	316.6	259.1	151.0	121.0	29.5
Cypress	1934	245.9	15.8	27.0	36.7	38. 1	36.6	40.8	50.9
	1949	110.1	6.5	14.7	17.3	13.6	13.8	20.9	23.3
	1959	273.9	19.1	37.3	38.6	40.4	44.1	56.3	38. 1
Hardwood	1934	1,062.3	84.8	108.5	120.4	170.8	154.8	216.8	206. 2
	1949	1,282.4	125.6	147.5	177.0	194.8	185.3	214.3	237.9
	1959	1,522.8	132.2	184.3	234.2	203.4	217.4	298.2	253. 1

<sup>1/</sup> In order to provide a basis for valid comparisons, adjustments have been made to allow for differences in utilization standards from survey to survey. Thus, the volumes shown here will not agree with volumes previously published or current volumes appearing elsewhere in this report.
2/ Excludes volume of palm.

Table 33d.--Net volume  $^{1/}$  of growing stock and cull timber, by diameter class and species group, Central Florida, 1936, 1949, and 1959

## (In million cubic feet)

### GROWING STOCK

Species		All			Diame	ter class (i	nches)		
group	Year	classes	6	8	10	12	14	16-18	20+
Pine	1936	523.2	25.3	90.2	132.8	105.7	71.8	65.4	32.0
	1949	462.1	27.7	99.1	139.0	106.4	50.4	28.6	10.9
	1959	313.0	27.7	74.3	85.0	60.6	32.3	26.7	6.4
Cypress	1936	286.0	28.0	41.6	67.0	55.1	33.5	30.9	29.9
	1949	258.7	32.9	51.7	64.4	52.9	42.5	13.7	0.6
	1959	384.9	40.0	68.8	62.1	65.7	63.1	59.4	25.8
Hardwood	1936	265.8	17.9	27.7	37.7	42.2	38.3	51.3	50.7
	1949	291.0	21.9	41.3	43.6	42.8	47.0	46.0	48.4
	1959	345.1	28.6	51.0	52.1	46.0	47.1	56.5	63.8
				CULL TIME	ER2/				
Pine	1936	9.9	1.0	1.2	2.0	1.8	1.2	1.8	0.9
	1949	13.8	2.1	1.1	2.7	4.1	0.7	3.1	
	1959	19.0	1. 2	2.5	5.3	5.5	1. 1	1. 8	1.6
Cypress	1936	22.2	3.7	5.0	4. 1	2.7	1.5	1.3	3.9
	1949	52.3	3.2	5.9	3.9	7.2	3.1	5.9	23. 1
	1959	56.3	4.3	4.5	22.4	16.6	2.6	4.2	1. 7
Hardwood	1936	224.7	42.5	37.3	39.6	26.6	20.5	29.2	29.0
	1949	337.0	51.5	39.2	44.2	49.7	24.6	49.2	78.6
	1959	330.0	39.4	38.8	46.3	61.9	35.7	52.5	55.4
				ALL TIMB	ER-2/				
Pine	1936	533.1	26.3	91.4	134.8	107.5	73.0	67.2	32.9
	1949	475.9	29.8	100.2	141.7	110.5	51.1	31.7	10.9
	1959	332.0	28.9	76.8	90.3	66.1	33.4	28.5	8.0
Cypress	1936	308.2	31.7	46.6	71.1	57.8	35.0	32.2	33.8
	1949	311.0	36.1	57.6	68.3	60.1	45.6	19.6	23.7
	1959	441.2	44.3	73.3	84.5	82.3	65.7	63.6	27.5
Hardwood	1936	490.5	60.4	65.0	77.3	68.8	58.8	80.5	79.7
	1949	628.0	73.4	80.5	87.8	92.5	71.6	95.2	127.0
	1959	675.1	68.0	89.8	98.4	107.9	82.8	109.0	119.2

<sup>1/</sup> In order to provide a basis for valid comparisons, adjustments have been made to allow for differences in utilization standards from survey to survey. Thus, the volumes shown here will not agree with volumes previously published or current volumes appearing elsewhere in this report.

2/ Excludes volume of palm.

Table 33e.--Net volume  $\frac{1}{2}$  of growing stock and cull timber, by diameter class and species group, South Florida, 1936, 1949, and 1959

# (In million cubic feet)

# GROWING STOCK

Species		A11			Diame	eter class (	inches)		
group	Year	classes	6	8	10	12	14	16-18	20+
Pine	1936	210.5	11.1	26.5	38.8	38.8	34.4	42.3	18.6
	1949	115.9	9.1	25.3	37.4	19.2	9.3	14.0	1.6
	1959	112.6	13.2	22.7	26.3	25.4	16.3	7.6	1. 1
Cypress	1936	193.9	19.0	28.2	34. 7	28.3	21.5	23.3	38. 9
	1949	130.3	14.7	27.9	33.9	24.7	14.1	9.3	5.7
	1959	228.5	31.0	39.0	40.8	37.5	33.7	21.4	25.1
Hardwood	1936	6.1	0.7	0.5	1, 2	1.4	0.9	0.7	0.7
	1949	2.0	0.5	0.7	0.2	0.2	0.3	0.1	
	1959	12.1	2.2	2.4	2.2	0.6	1.5	1.4	1.8
				CULL TIME	ER2				
Pine	1936	8.6	0.6	1.3	1.4	1.3	1.2	1.9	0.9
	1949	1.3		0.3	0.5		0.4		0.1
	1959	3.3	0.3	0.5	0.6	0.9	0.4	0.6	
Cypress	1936	46.2	20.0	11.4	6.1	3.9	1.3	1.5	2.0
	1949	51.7	8.3	10.0	5.4	11.2	7.8	4.8	4.2
	1959	59.4	9.1	7.3	18.1	14.9	4.0	3, 2	2.8
Hardwood	1936	15. 1	2.8	3.7	2.5	2.0	1.3	1.5	1. 3
	1949	11.0	1.5	1.3	2.5	1.3	1.0	0.3	3. 1
	1959	34.6	8.3	7. 1	4.3	3. 4	4. 3	5.2	2.0
				ALL TIMB	ER 2/				
Pine	1936	219.1	11.7	27.8	40.2	40.1	35.6	44. 2	19.5
	1949	117.2	9.1	25.6	37.9	19.2	9.7	14.0	1.7
	1959	115.9	13.5	23.2	26.9	26.3	16.7	8.2	1.1
Cypress	1936	240.1	39.0	39.6	40.8	32.2	22.8	24.8	40.9
	1949	182.0	23.0	37.9	39.3	35.9	21.9	14.1	9.9
	1959	287.9	40.1	46.3	58.9	52.4	37.7	24.6	27.9
Hardwood	1936	21.2	3.5	4.2	3.7	3.4	2.2	2.2	2. 0
	1949	13.0	2.0	2.0	2.7	1.5	1.3	0.4	3. 1
	1959	46.7	10.5	9.5	6.5	4.0	5.8	6.6	3.8

<sup>1/</sup> In order to provide a basis for valid comparisons, adjustments have been made to allow for differences in utilization standards from survey to survey. Thus, the volumes shown here will not agree with volumes previously published or current volumes appearing elsewhere in this report.

2/ Excludes volume of palm.

Table 34.--Timber-growth projections, 1958 to 1989

		Assu	med cut			Projec	cted growth	
Period	All species	Pine	Cypress	Hard- wood	All species	Pine	Cypress	Hard- wood
		LARGE S.	AWTIMBER (	In million t	ooard feet)			
1958	240.4	146.1	27.5	66.8	456.4	243.5	72. 8	140. 1
1969	339.7	187.6	67.9	84.2	285.3	116.6	51.2	117.5
1979	272.8	117.3	58.1	97.4	218.4	46.3	41.4	130.7
1989	159.8	0.0	51.9	107.9	176.4	0, 0	35.2	141.2
		SMALL S	AWTIMBER (	In million l	poard feet)			
1958	493.2	465.4	3.0	24.8	861.3	685.7	92.6	83.0
1969	608.1	531.3	46.1	30.7	673.4	545.1	67.0	61.3
1979	650.7	565.4	49.8	35.5	716.0	579.2	70.7	66.1
1989	647.6	552.4	55. 1	40.1	712.9	566.2	76.0	70.7
		GROWII	NG STOCK (Ir	million cu	bic feet)			
1958	189.3	159.5	7. 1	22.7	311.8	211.8	35.4	64.6
1969	274.8	209.1	29.7	36.0	310.3	211.9	35.0	63.4
1979	292.3	218.9	29.5	43.9	327.8	221.7	34.8	71.3
1989	304.6	223,4	29.9	51.3	340.1	226, 2	35. 2	78.7
		CULL	TIMBER (In	million cub	ic feet)			
1958	8.7	0.4	0.0	8.3	36.9	5. 2	2.7	29.0
1969	39.3	10.0	5,5	23.8	58.1	9.5	6.1	42.5
1979	44.7	10.2	5.2	29.3	63.5	9.7	5.8	48.0
1989	50, 4	10.2	5.3	34.9	69.2	9.7	5.9	53.6
		ALL '	TIMBER (In r	nillion cubi	c feet)			
1958	198.0	159.9	7. 1	31.0	348. 7	217.0	38. 1	93.6
1969	314.1	219.1	35.2	59.8	368.4	221.4	41.1	105.9
1979	337.0	229.1	34.7	73, 2	391.3	231.4	40.6	119.3
1989	355.0	233.6	35,2	86, 2	409.3	235.9	41.1	132.3

 $<sup>\</sup>underline{{\it J}}'$  Based on projection of average annual change between 1935 and 1958.

Table 35a. -- County area, by class, Northeast Florida, 1959

		Nonfore	st area	Fo	rest land	
County	Total areal/	Land	Water	Non- commercial	Comme	rcial
	Thousand acres	Thousand acres	Thousand acres	Thousand acres	Thousand acres	Percent
Alachua	615.0	285.7	44.7	2.5	282.1	49.5
Baker	376.3	22.2	1.9	1.9	350.3	93.6
Bradford	195.2	44.9	7.7		142.6	76.1
Clay	412.2	44.4	30.9	1.3	335.6	88.0
Columbia	505.0	142.0	1.3	9.5	352.2	69.9
Dixie	453.8	39.1	19.1	7.2	388.4	89.3
Duval	537.6	151.0	46.7	2.3	337.6	68.8
Flagler	322.5	39.1	15.6	2.8	265.0	86.3
Gilchrist	222.7	76.9	1.1		144.7	65.3
Hamilton	329.6	68.4	3.4	1.1	256.7	78.7
Lafayette	352.6	52.9	9.2	0.2	290.3	84.5
Levy	727.7	172.1	27.3	2.4	525.9	75.1
Madison	453.1	127.3	7.9	( <u>2</u> /)	317.9	71.4
Marion	1,057.3	297.6	27.9	1.5	730.3	70.9
Nassau	429.4	58.0	17.8	0.9	352.7	85.7
Putnam	562.6	82.6	60.0	0.6	419.4	83.4
St. Johns	422.4	97.7	36.3	4.6	283.8	73.5
Suwannee	439.7	234.4	7.4	0.7	197.2	45.6
Taylor	673.3	63.0	21.0	10.5	578.8	88.7
Union	156.8	23.9	3.2		129.7	84.4
Volusia	772.5	181.3	81.5	23.7	486.0	70.3
Total	10,017.3	2,304.5	471.9	73. 7	7,167.2	75.1

 $<sup>\</sup>ensuremath{\mathcal{Y}}$  Gross area from Bureau of the Census, 1950.  $\ensuremath{\mathcal{Y}}$  Less than 50 acres.

Table 35c. -- County area, by class, Central Florida, 1959

		Nonfore	st area	Fo	rest land	
County	Total area 1/	Land	Water	Non- commercial	Comme	ercial
	Thousand acres	Thousand acres	Thousand acres	Thousand acres	Thousand acres	Percent
Brevard	839.1	398.6	202.9	26.5	211.1	33.2
Citrus	423.0	106.2	78.0	1.9	236.9	68.7
De Soto	416.6	209.2	38.6	0.4	168.4	44.6
Hardee	403.2	155.3	7.6	0.4	239.9	60.6
Hernando	325.1	90.6	19.5	0.3	214.7	70.3
Highlands	716.2	381.3	63.5	17.1	254.3	39.0
Hillsborough	679.7	359.9	31.4	10.9	277.5	42.8
Indian River	350.7	189.8	46.1	9.5	105.3	34.6
Lake	744.3	299.4	143.6	0.6	300.7	50.1
Manatee	502.4	158.3	58.1	14.8	271.2	61.0
Okeechobee	499.2	325.5	19.7	1.0	153.0	31.9
Orange	641.9	264.1	65.9	4.2	307.7	53.4
Osceola	938.9	365.5	104.8	6.9	461.7	55.4
Pasco	494.1	205.9	23.3	6.2	258.7	54.9
Pinellas	197.8	99.2	39.2	4.5	54.9	34.6
Polk	1,310.7	529.8	143.8	5.8	631.3	54.1
St. Lucie	400.6	191.3	52.8	12.9	143.6	41.3
Sarasota	396.8	127.5	42.0	6.7	220.6	62.2
Seminole	225.3	90.4	26.3	(2/)	108.6	54.6
Sumter	367. 4	148.3	14.0	0.1	205.0	58.0
Total	10,873.0	4,696.1	1,221.1	130.7	4,825.1	50.0

<sup>1/</sup> Gross area from Bureau of the Census, 1950. 2/ Less than 50 acres.

Table 35b. -- County area, by class, Northwest Florida, 1959

	Total	Nonfore	st area	Fo	rest land	
County	area 1/	Land	Water	Non- commercial	Comme	ercial
	Thousand acres	Thousand acres	Thousand acres	Thousand acres	Thousand acres	Percent
Bay	551.0	49.3	74.7	0.5	426.5	89.5
Calhoun	362.9	51.3	7.6		304.0	85.6
Escambia	484.5	122.0	68.6	2.5	291.4	70.1
Franklin	361.6	32.3	17.6	0.7	311.0	90.4
Gadsden	334.7	88.2	10.2		236.3	72.8
Gulf	369.9	22.1	18.8	1.4	327.6	93.3
Holmes	309.8	116.5	2.5		190.8	62.1
Jackson	606.7	268.3	18.3	1.6	318.5	54.1
Jefferson	389.8	133.9	7.2		248.7	65.0
Leon	445.5	129.0	10.6	1.0	304.9	70.1
Liberty	540.8	10.4	8.2	7.0	515.2	96.7
Okaloosa	641.9	87.8	39.8		514.3	85.4
Santa Rosa	737.3	111.5	86.5		539.3	82.9
Wakulla	406.4	65.1	16.2	1.5	323.6	82.9
Walton	726.4	95.5	60.0	4.9	566.0	84.9
Washington	391.0	70.8	16.3		303.9	81.1
Total	7,660.2	1,454.0	463.1	21.1	5,722.0	79.5

<sup>1/</sup> Gross area from Bureau of the Census, 1950.

Table 35d.--County area, by class, South Florida, 1959

		Nonfore	st area	Fo	rest land		
County	Total area.1/	Land Water		Non- commercial	Comme	Commercial	
	Thousand acres	Thousand acres	Thousand acres	Thousand acres	Thousand acres	Percent	
Broward	780.8	667.2	26.7	69.7	17.2	2.3	
Charlotte	532.5	145.9	107.3	20.6	258.7	60.8	
Collier	1,356.2	358.0	83.7	377.7	536.8	42.2	
Dade	1,349.8	998.5	73.4	249.4	28.5	2.2	
Glades	574.7	396.2	23.8	17.1	137.6	25.0	
Hendry	760.9	407.1	48.3	9.7	295.8	41.5	
Lee	643.2	179.6	160.3	60.4	242.9	50.3	
Martin	372.5	117.7	66.4	17.0	171.4	56.0	
Monroe	907.5	360.7	283.1	246.5	17.2	2.8	
Palm Beach	1,649.9	912.2	435.9	136.4	165.4	13.6	
Total	8,928.0	4,543.1	1,308.9	1,204.5	1,871.5	24.6	

<sup>1/</sup> Gross area from Bureau of the Census, 1950.

Table 36a.--Ownership of commercial forest land, by county, Northeast Florida, 1959

(In thousand acres)

			Public		
County	Total commercial	National forest	Other public	Total	Private
Alachua	282.1		9.5	9.5	272.6
Baker	350.3	77.5	0.1	77.6	272.7
Bradford	142.6		9.9	9.9	132.7
Clay	335.6		104.4	104.4	231.2
Columbia	352.2	73.0	U. 6	73.6	278.6
Dixie	388.4		0.5	0.5	387.9
Duval	337.6		8.3	8.3	329.3
Flagler	265.0		0.4	0.4	264.6
Gilchrist	144.7		0.4	0.4	144.3
Hamilton	256.7				256.7
Lafayette	290.3				290.3
Levy	525.9		0.3	0.3	525.6
Madison	317.9		0.2	0.2	317.7
Marion	730.3	248.6	8.8	257.4	472.9
Nassau	352.7		4.2	4.2	348.5
Putnam	419.4	19.2	10.8	30.0	389.4
St. Johns	283.8		1. 3	1.3	282.5
Suwannee	197.2				197.2
Taylor	578.8		0.4	0.4	578.4
Union	129.7		9.0	9.0	120.7
Volusia	486.0		1.9	1.9	484.1
Total	7,167.2	418.3	171.0	589.3	6,577.9

Table 36c.--Ownership of commercial forest land, by county, Central Florida, 1959

(In thousand acres)

			Public		
County	Total commercial	National forest	Other public	Total	Private
Brevard	211. 1		6.8	6.8	204.3
Citrus	236.9		43.7	43.7	193. 2
De Soto	168.4		0.7	0.7	167.7
Hardee	239.9		1. 2	1. 2	238.7
Hernando	214.7		35.2	35, 2	179.5
Highlands	254.3		46.1	46.1	208.2
Hillsborough	277.5		1. 1	1. 1	276.4
Indian River	105.3		1.9	1.9	103.4
Lake	300.7	65.9	2.3	68.2	232.5
Manatee	271.2		0.2	0.2	271.0
Okeechobee	153.0		0.4	0.4	152.6
Orange	307.7		0.4	0.4	307.3
Osceola	461.7		0.5	0.5	461.2
Pasco	258.7		7.9	7.9	250.8
Pinellas	54.9		0.7	0.7	54.2
Polk	631.3		22.1	22.1	609.2
St. Lucie	143.6		1.6	1.6	142.0
Sarasota	220.6		0.4	0.4	220.2
Seminole	108.6				108.6
Sumter	205.0		31.5	31.5	173.5
Total	4,825.1	65.9	204.7	270.6	4,554.5

Table 36b.--Ownership of commercial forest land, by county, Northwest Florida, 1959

(In thousand acres)

	T-1-)		Public		
County	Total commercial	National forest	Other public	Total	Private
Bay	426.5		27. 3	27.3	399.2
Calhoun	304.0		2.8	2.8	301.2
Escambia	291.4		3.3	3.3	288.1
Franklin	311.0	21.0	0.9	21.9	289.1
Gadsden	236.3		1.9	1.9	234.4
Gulf	327.6		1.3	1.3	326.3
Holmes	190.8		0.7	0.7	190.1
Jackson	318.5		5.9	5.9	312.6
Jefferson	248.7		4.3	4.3	244.4
Leon	304.9	100.9	2.0	102.9	202.0
Liberty	515.2	257.4		257.4	257.8
Okaloosa	514.3		279.3	279.3	235.0
Santa Rosa	539.3		187.5	187.5	351.8
Wakulla	323.6	163.6	32.9	196.5	127.1
Walton	566.0		140.8	140.8	425.2
Washington	303.9		1.9	1.9	302.0
Total	5,722.0	542.9	692.8	1,235.7	4,486.3

Table 36d.--Ownership of commercial forest land, by county, South Florida, 1959

(In thousand acres)

County	Total commercial	National forest	Other public	Total	Private	
Broward	17, 2		1.3	1. 3	15.9	
Charlotte	258.7		48.1	48.1	210.6	
Collier	536.8		4. 9	4.9	531.9	
Dade	28.5		4.5	4.5	24.0	
Glades	137.6				137.6	
Hendry	295.8		19.6	19.6	276.2	
Lee	242.9		0.7	0.7	242.2	
Martin	171.4		0.9	0.9	170.5	
Monroe	17.2				17.2	
Palm Beach	165.4		42.0	42.0	123.4	
Total	1,871.5		122.0	122.0	1,749.5	

Table 37a.--Net volume 1/ of sawtimber, by county and species group, Northeast Florida, 1959

(In million board feet)

County	Softwood	Hardwood	Total
Alachua	201.2	112.6	313.8
Baker	640.3	120.7	761.0
Bradford	. 159.6	37.1	196.7
Clay	207.2	113.6	320.8
Columbia	474.7	65.6	540.3
Dixie	323.2	443.7	766.9
Duval	101.4	236.0	337.4
Flagler	489.3	90.9	580.2
Gilchrist	58.4	54.2	112.6
Hamilton	419.0	72.0	491.0
Lafayette	238.9	142.5	381.4
Levy	360.1	349.8	709.9
Madison	363.0	139.2	502.2
Marion	570.3	226.1	796.4
Nassau	238.0	205.6	443.6
Putnam	208.4	179.0	387.4
St. Johns	282.6	188.0	470.6
Suwannee	96.8	173.5	270.3
Taylor	725.6	233.1	958.7
Union	112.4	54.7	167.1
Volusia	499.4	138.4	637.8
Total	6,769.8	3,376.3	10,146.1

<sup>1/</sup> Log scale, International  $\frac{1}{4}$ -inch rule.

Table 37c.--Net volume  $\frac{\rm J}{\rm J}$  of sawtimber, by county and species group, Central Florida, 1959

(In million board feet)

County	Softwood	Hardwood	Total
n -5000	50.2	EQ. 2	117.0
Brevard	58.7	58.3	117.0
Citrus	121.6	57.7	179.3
De Soto	17.5	40.7	58.2
Hardee	46.6	21.5	68.1
Hernando	95.4	113.8	209.2
Highlands	85.2	29.2	114.4
Hillsborough	291.0	109.3	400.3
Indian River	45.9	7. 1	53.0
Lake	139.2	81.8	221.0
Manatee .	30.8	27.2	58.0
Okeechobee	26.0	4.8	30.8
Orange	148.3	50.3	198.6
Osceola	240.1	69.7	309.8
Pasco	287.0	43.9	330.9
Pinellas	29.2	1.9	31.1
Polk	227.5	156.9	384.4
St. Lucie	24.5	3. 7	28.2
Sarasota	46.8	4.4	51.2
Seminole	65.2	63.1	128.3
Sumter	207.1	136.7	343.8
Total	2,233.6	1,082.0	3,315.6

<sup>1</sup>/ Log scale, International  $\frac{1}{4}$ -inch rule.

Table 37b.--Net volume  $\frac{1}{\sqrt{}}$  of sawtimber, by county and species group, Northwest Florida, 1959

(In million board feet)

County	Softwood	Hardwood	Total	
Bay	111.0	15. 8	126.8	
Calhoun	125. 1	146.0	271.1	
Escambia	292.5	121.2	413.7	
Franklin	221.2	102.2	323.4	
Gadsden	160.7	239.8	400.5	
Gulf	194.9	239.3	434.2	
Holmes	105.3	100.2	205.5	
Jackson	140.9	344.7	485.6	
Jefferson	481.9	241.5	723.4	
Leon	476.1	266.0	742.1	
Liberty	679.5	502.1	1,181.6	
Okaloosa	386.2	123.9	510.1	
Santa Rosa	565.8	256.2	822.0	
Wakulla	416.3	202.8	619.1	
Walton	142.2	115.0	257.2	
Washington	211.5	129.8	341.3	
Total	4,711.1	3,146.5	7,857.6	

<sup>1</sup> Log scale, International  $\frac{1}{4}$ -inch rule.

Table 37d.--Net volume  $\frac{1}{}^{}$  of sawtimber, by county and species group, South Florida, 1959

(In million board feet

County	Softwood	Hardwood	Total	
Broward	7.3		7. 3	
Charlotte	20.1		20.1	
Collier	592.2	19.9	612.1	
Dade	15.1		15.1	
Glades	166.6		166.6	
Hendry	93.5	13.9	107.4	
Lee	62.4		62.4	
Martin	20.5	1.3	21.8	
Monroe	6.0		6.0	
Palm Beach	46.3		46.3	
Total	1,030.0	35. 1	1,065.1	

<sup>1</sup> Log scale, International 4-inch rule.

Table 38a. --Net volume  $\frac{1}{2}$  of growing stock and cull timber, by species group and county, Northeast Florida, 1959 (In thousand cords)

		Growi	ng stock			Cul1	timber 2/		Total all timber
County	Pine	Cypress	Hardwood	Total	Pine	Cypress	Hardwood	Total	
Alachua	653	166	512	1, 331	7	7	305	319	1,650
Baker	2,693	430	592	3, 715	41	52	290	383	4,098
Bradford	617	76	172	865		8	23	31	896
Clay	844	144	431	1,419	26	9	229	264	1,683
Columbia	1,555	494	587	2,636		28	291	319	2,955
Dixie	947	655	1,735	3, 337		25	1,437	1, 462	4,799
Duva1	407	50	911	1, 368		11	359	370	1,738
Flagler	905	807	423	2, 135	24	49	1,079	1, 152	3, 287
Gilchrist	94	161	176	431		10	306	316	747
Hamilton	1, 304	246	505	2,055		10	262	272	2, 327
Lafayette	888	311	639	1,838	19	5	242	266	2, 104
Levy	1,027	561	1,431	3, 019	65	41	2,205	2,311	5, 330
Madison	823	504	776	2, 103	21	10	335	366	2,469
Marion	2,537	139	1,071	3, 747	49		734	783	4,530
Nassau	871	266	1,034	2, 171	11	15	668	694	2,865
Putnam	800	63	811	1,674	73	5	831	909	2,583
St. Johns	977	171	977	2, 125	42	16	666	724	2, 849
Suwannee	291		642	933	22		257	279	1,212
Taylor	1,844	709	1,312	3, 865		32	1,506	1,538	5,403
Union	363	204	330	897		16	69	85	982
Volusia	962	1, 316	716	2, 994	55	84	811	950	3, 944
Total	21,402	7,473	15, 783	44, 658	455	433	12,905	13, 793	58, 451

Table 38b. --Net volume  $\frac{1}{2}$  of growing stock and cull timber, by species group and county, Northwest Florida, 1959 (In thousand cords)

		Growi	ng stock			Cul1	timber <u>2</u> /		Total
County	Pine	Cypress	Hardwood	Total	Pine	Cypress	Hardwood	Total	all timber
Bay	895	22	183	1, 100	50	7	83	140	1, 240
Calhoun	756	61	746	1, 563	21		194	215	1,778
Escambia	1,272	59	532	1, 863	3		153	156	2,019
Franklin	763	458	472	1, 693	52	42	208	302	1, 995
Gadsden	663		1,276	1, 939	3		308	311	2,250
Gulf	596	205	1, 127	1,928		39	588	627	2,555
Holmes	545	24	621	1, 190	5	7	283	295	1,485
Jackson	719	53	1,415	2, 187	9	21	218	248	2,435
Jefferson	1,375	247	1,222	2,844	9	1	480	490	3, 334
Leon	1,791	56	1,164	3, 011	14	3	265	282	3, 293
Liberty	2,095	705	1,995	4,795	19	210	809	1,038	5, 833
Okaloosa	1,407	138	840	2, 385	36	26	440	502	2, 887
Santa Rosa	1,836	221	1,098	3, 155		50	466	516	3, 671
Wakulla	1,812	48	938	2,798	49	19	449	517	3, 315
Walton	833	50	851	1,734	61	35	495	591	2, 325
Washington	400	455	721	1,576	44	20	487	551	2, 127
Total	17, 758	2,802	15, 201	35, 761	375	480	5,926	6, 781	42,542

<sup>1/</sup> Sound wood and bark.2/ Includes volume of palm.

<sup>1/</sup> Sound wood and bark. 2/ Includes volume of palm.

Table 38c. --Net volume  $\frac{1}{2}$  of growing stock and cull timber, by species group and county, Central Florida, 1959 (In thousand cords)

		Growi	ng stock			Cull	timber 2/		Total
County	Pine	Cypress	Hardwood	Total	Pine	Cypress	Hardwood	Total	all timber
Brevard	218	33	262	513	14	6	714	734	1, 247
Citrus	347	161	292	800	4	10	717	731	1,531
De Soto	66	21	190	277			374	374	651
Hardee	163	16	90	269	5		234	239	508
Hernando	328	4	640	972			424	424	1, 396
Highlands	162	124	204	490		7	179	186	676
Hillsborough	329	790	490	1,609		33	342	375	1,984
Indian River	95	127	44	266	7	11	298	316	582
Lake	408	388	424	1, 220	14	14	1,425	1,453	2,673
Manatee	153		119	272	5		131	136	408
Okeechobee	69	74	95	238		5	382	387	625
Orange	308	472	396	1, 176		19	790	809	1,935
Osceola	434	398	331	1, 163		67	638	705	1, 868
Pasco	166	897	326	1, 389		73	199	272	1,661
Pinellas	77	63	18	158	2		33	35	193
Polk	498	872	887	2, 257	15	83	727	825	3, 082
St. Lucie	67	29	12	108	2		226	228	336
Sarasota	266		24	290	22		1,301	1, 323	1,613
Seminole	162	39	278	479	8	4	1, 349	1, 361	1,840
Sumter	211	608	631	1,450		10	320	330	1,780
Total	4,527	5, 116	5,753	15, 396	98	342	10,803	11, 243	26, 639

Table 38d. --Net volume  $\frac{1}{2}$  of growing stock and cull timber, by species group and county, South Florida, 1959

County		Growi	ng stock		Cull timber 2/				Total	
	Pine	Cypress	Hardwood	Total	Pine	Cypress	Hardwood	Total	all timber	
Broward	6	28	~~	34		2	34	36	70	
Charlotte	74	10		84		2	64	66	150	
Collier	632	1,912	171	2,715	7	434	1,781	2,222	4,937	
Dade	66			66			6	6	72	
Glades	253	396	7	656		16	343	359	1,015	
Hendry	200	328	69	597		77	544	621	1, 218	
Lee	59	299		358	3	4	46	53	411	
Martin	77	1	7	85		2	403	405	490	
Monroe	23	42		65		4		4	69	
Palm Beach	204	25		229	4	3	69	76	305	
Total	1,594	3,041	254	4,889	14	544	3, 290	3,848	8, 737	

Sound wood and bark.
 Includes volume of palm.

 $<sup>\</sup>frac{1}{2}$ / Sound wood and bark.  $\frac{1}{2}$ / Includes volume of palm.





